

# Diodes and rectifiers

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High power efficiency and density





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# Schottky barrier diodes

## SIGNAL SCHOTTKY DIODES

| Part number         | Package                           | Number of diodes | Repetitive peak reverse voltage (V <sub>RRM</sub> ) | Average rectified current (I <sub>A</sub> ) | Forward voltage (V <sub>F</sub> ) | V <sub>F</sub> measure condition (@ I <sub>F</sub> ) spec | Reverse current (I <sub>R</sub> ) | Junction capacitance (C <sub>j</sub> ) | Reverse recovery time (t <sub>rr</sub> ) | Junction temperature (T <sub>j</sub> ) |
|---------------------|-----------------------------------|------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------|-----------------------------------------------------------|-----------------------------------|----------------------------------------|------------------------------------------|----------------------------------------|
|                     |                                   |                  | max (V)                                             | max (A)                                     | max (V)                           | (A)                                                       | max (mA)                          | max (pF)                               | max (ns)                                 | max (°C)                               |
| 10 V and 20 V       |                                   |                  |                                                     |                                             |                                   |                                                           |                                   |                                        |                                          |                                        |
| BAT60               | SOD-323                           | 1                | 10                                                  | 3                                           | 0.4                               | 0.1                                                       | 0.006                             | 60                                     | 0                                        | 150                                    |
| BAT20J              | SOD-323                           | 1                | 23                                                  | 1                                           | 0.62                              | 1                                                         | 0.012                             | 35                                     | 0                                        | 150                                    |
| 30 V                |                                   |                  |                                                     |                                             |                                   |                                                           |                                   |                                        |                                          |                                        |
| BAR42               | SOT-23                            | 1                | 30                                                  | 0.1                                         | 1                                 | 0.1                                                       | 0.1                               | 10                                     | 5                                        | 150                                    |
| BAR43               | SOT-23                            | 1, 2             | 30                                                  | 0.1                                         | 1                                 | 0.1                                                       | 0.1                               | 10                                     | 5                                        | 150                                    |
| BAT42               | DO-35                             | 1                | 30                                                  | 0.2                                         | 0.65                              | 0.05                                                      | 0.001                             | 15                                     | 5                                        | 125                                    |
| BAT43               | DO-35                             | 1                | 30                                                  | 0.2                                         | 0.45                              | 0.015                                                     | 0.001                             | 15                                     | 5                                        | 125                                    |
| TMMBAT42            | MiniMELF                          | 1                | 30                                                  | 0.2                                         | 0.65                              | 0.05                                                      | 0.001                             | 15                                     | 5                                        | 125                                    |
| TMMBAT43            | MiniMELF                          | 1                | 30                                                  | 0.2                                         | 0.45                              | 0.015                                                     | 0.001                             | 15                                     | 5                                        | 125                                    |
| BAT30               | SOD-523, SOD-923, SOT-323         | 1, 2             | 30                                                  | 0.3                                         | 0.58                              | 0.2                                                       | 0.005                             | 35                                     | 0                                        | 150                                    |
| BAT30F3             | Flip-Chip 400μ                    | 1                | 30                                                  | 0.3                                         | 0.545                             | 0.2                                                       | 0.006                             | -                                      | 0                                        | 85                                     |
| 40 V                |                                   |                  |                                                     |                                             |                                   |                                                           |                                   |                                        |                                          |                                        |
| BAT54               | SOD-323, SOD-523, SOT-23, SOT-323 | 1, 2             | 40                                                  | 0.3                                         | 0.9                               | 0.1                                                       | 0.001                             | 10                                     | 5                                        | 150                                    |
| BAT48               | SOD-123, SOD-323, DO-35           | 1                | 40                                                  | 0.35                                        | 0.9                               | 0.5                                                       | 0.05                              | 40                                     | 10                                       | 150                                    |
| TMMBAT48            | MiniMELF                          | 1                | 40                                                  | 0.35                                        | 0.9                               | 0.5                                                       | 0.05                              | 40                                     | 10                                       | 125                                    |
| TMBYV10-40          | MELF                              | 1                | 40                                                  | 1                                           | 0.55                              | 1                                                         | 0.5                               | 400                                    | 0                                        | 125                                    |
| 60 V, 70 V and 80 V |                                   |                  |                                                     |                                             |                                   |                                                           |                                   |                                        |                                          |                                        |
| 1N6263              | DO-35                             | 1                | 60                                                  | 0.015                                       | 1                                 | 0.015                                                     | 0.2                               | 2.2                                    | 0.1                                      | 200                                    |
| TMM6263             | MiniMELF                          | 1                | 60                                                  | 0.015                                       | 1                                 | 0.015                                                     | 0.2                               | 2.2                                    | 0.1                                      | 200                                    |
| TMBYV10-60          | MELF                              | 1                | 60                                                  | 1                                           | 0.7                               | 1                                                         | 0.5                               | 300                                    | 0                                        | 125                                    |
| 1N5711              | DO-35                             | 1                | 70                                                  | 0.015                                       | 1                                 | 0.015                                                     | 0.02                              | 2                                      | 0.1                                      | 200                                    |
| BAR18               | SOT-23                            | 1                | 70                                                  | 0.07                                        | 0.41                              | 0.001                                                     | 0.000                             | 2                                      | 0.1                                      | 150                                    |
| BAS70               | SOD-323, SOD-523, SOT-23, SOT-323 | 1, 2             | 70                                                  | 0.07                                        | 1                                 | 0.015                                                     | 0.01                              | 2                                      | 0                                        | 150                                    |
| TMBAT49             | MELF                              | 1                | 80                                                  | 0.5                                         | 1                                 | 1                                                         | 0.2                               | 200                                    | 0                                        | 125                                    |

SIGNAL SCHOTTKY DIODES

| Part number | Package                          | Number of diodes | Repetitive peak reverse voltage (V <sub>RRM</sub> ) | Average rectified current (I <sub>p</sub> ) | Forward voltage (V <sub>F</sub> ) | V <sub>F</sub> measure condition (@ I <sub>p</sub> ) spec | Reverse current (I <sub>r</sub> ) | Junction capacitance (C <sub>j</sub> ) | Reverse recovery time (t <sub>rr</sub> ) | Junction temperature (T <sub>j</sub> ) |
|-------------|----------------------------------|------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------|-----------------------------------------------------------|-----------------------------------|----------------------------------------|------------------------------------------|----------------------------------------|
|             |                                  |                  | max (V)                                             | max (A)                                     | max (V)                           | (A)                                                       | max (mA)                          | max (pF)                               | max (ns)                                 | max (°C)                               |
| 100 V       |                                  |                  |                                                     |                                             |                                   |                                                           |                                   |                                        |                                          |                                        |
| BAR46       | SOT-23                           | 1, 2             | 100                                                 | 0.15                                        | 0.45                              | 0.01                                                      | 0.005                             | 20                                     | 0                                        | 150                                    |
| BAT46       | SOD-123, SOD-323, SOT-323, DO-35 | 1, 2             | 100                                                 | 0.15                                        | 1                                 | 0.25                                                      | 20                                | 20                                     | 0                                        | 150                                    |
| TMMBAT46    | MiniMELF                         | 1                | 100                                                 | 0.15                                        | 1                                 | 0.25                                                      | 20                                | 20                                     | 0                                        | 125                                    |
| BAT41       | SOD-123, SOD-523, DO-35          | 1                | 100                                                 | 0.2                                         | 1                                 | 0.2                                                       | 0.1                               | 10                                     | 0                                        | 150                                    |
| TMMBAT41    | MiniMELF                         | 1                | 100                                                 | 0.2                                         | 1                                 | 0.2                                                       | 0.1                               | 10                                     | 0                                        | 125                                    |

## POWER SCHOTTKY DIODES

| Part number   | Package                      | Number of diodes | Repetitive peak reverse voltage (V <sub>RRM</sub> ) | Average rectified current (I <sub>F</sub> ) | Forward voltage (V <sub>F</sub> ) | V <sub>F</sub> measure condition (@ I <sub>F</sub> ) | Reverse current (I <sub>R</sub> ) | Non-repetitive peak forward surge current (I <sub>FSM</sub> ) | Junction temperature (T <sub>J</sub> ) |
|---------------|------------------------------|------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------|------------------------------------------------------|-----------------------------------|---------------------------------------------------------------|----------------------------------------|
|               |                              |                  | max (V)                                             | max (A)                                     | max (V)                           | (A)                                                  | max (mA)                          | max (A)                                                       | max (°C)                               |
| 15 V          |                              |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| STPS20L15     | D <sup>2</sup> PAK, TO-220AC | 1                | 15                                                  | 20                                          | 0.41                              | 19                                                   | 6                                 | 310                                                           | 125                                    |
| STPS40L15C    | TO-220AB, TO-247             | 2                | 15                                                  | 2 x 20                                      | 0.41                              | 19                                                   | 6                                 | 310                                                           | 125                                    |
| STPS120L15    | ISOTOP                       | 2                | 15                                                  | 2 x 60                                      | 0.43                              | 60                                                   | 22                                | 1200                                                          | 125                                    |
| 20 V          |                              |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| STPS0520Z     | SOD-123                      | 1                | 20                                                  | 0.5                                         | 0.385                             | 0.5                                                  | 0.15                              | 5.5                                                           | 125                                    |
| 1N5817        | DO-35                        | 1                | 20                                                  | 1                                           | 0.45                              | 1                                                    | 0.5                               | 25                                                            | 150                                    |
| STPS120M      | STmite                       | 1                | 20                                                  | 1                                           | 0.49                              | 1                                                    | 0.004                             | 50                                                            | 150                                    |
| STPS120MF     | STmiteFlat                   | 1                | 20                                                  | 1                                           | 0.49                              | 1                                                    | 0.004                             | 50                                                            | 150                                    |
| STPS1L20MF    | STmiteFlat                   | 1                | 20                                                  | 1                                           | 0.43                              | 1                                                    | 0.075                             | 50                                                            | 150                                    |
| 1N5822        | DO-201AD                     | 1                | 20                                                  | 3                                           | 0.525                             | 3                                                    | 2                                 | 80                                                            | 150                                    |
| 25 V          |                              |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| STPS2L25      | SMB, SMBflat                 | 1                | 25                                                  | 2                                           | 0.45                              | 2                                                    | 0.09                              | 75                                                            | 150                                    |
| STPS3L25S     | SMC                          | 1                | 25                                                  | 3                                           | 0.49                              | 3                                                    | 0.09                              | 75                                                            | 150                                    |
| STPS5L25      | DPAK                         | 1                | 25                                                  | 5                                           | 0.47                              | 5                                                    | 0.35                              | 75                                                            | 150                                    |
| STPS10L25     | D <sup>2</sup> PAK, TO-220AC | 1                | 25                                                  | 10                                          | 0.46                              | 10                                                   | 0.8                               | 200                                                           | 150                                    |
| STPS15L25     | TO-220AC                     | 1                | 25                                                  | 15                                          | 0.46                              | 15                                                   | 1.3                               | 250                                                           | 150                                    |
| STPS20L25C    | D <sup>2</sup> PAK, TO-220AB | 2                | 25                                                  | 2 x 10                                      | 0.46                              | 10                                                   | 0.8                               | 220                                                           | 150                                    |
| 30 V          |                              |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| 1N5818        | DO-35                        | 1                | 30                                                  | 1                                           | 0.5                               | 1                                                    | 0.5                               | 25                                                            | 150                                    |
| STPS130       | SMA, SMB                     | 1                | 30                                                  | 1                                           | 0.55                              | 1                                                    | 0.01                              | 50                                                            | 150                                    |
| STPS1L30      | SMA, SMB                     | 1                | 30                                                  | 1                                           | 0.395                             | 1                                                    | 0.2                               | 75                                                            | 150                                    |
| STPS1L30M     | STmite                       | 1                | 30                                                  | 1                                           | 0.395                             | 1                                                    | 0.2                               | 50                                                            | 150                                    |
| STPS1L30MF    | STmiteFlat                   | 1                | 30                                                  | 1                                           | 0.395                             | 1                                                    | 0.2                               | 50                                                            | 150                                    |
| STPS2L30      | SMA, SMAflat, SMBflat        | 1                | 30                                                  | 2                                           | 0.45                              | 2                                                    | 0.2                               | 75                                                            | 150                                    |
| STPS30L30DJF  | PowerFLAT™ 5 x 6             | 1                | 30                                                  | 7.5                                         | 0.51                              | -                                                    | -                                 | 250                                                           | 150                                    |
| STPS8L30      | DPAK                         | 1                | 30                                                  | 8                                           | 0.49                              | 8                                                    | 1                                 | 75                                                            | 150                                    |
| STPS8L30DEE   | PowerFLAT™ 3.3 x 3.3         | 1                | 30                                                  | 8                                           | 0.5                               | 8                                                    | 1                                 | 100                                                           | 150                                    |
| STPS15L30C    | DPAK                         | 2                | 30                                                  | 2 x 7.5                                     | 0.48                              | 7.5                                                  | 1                                 | 75                                                            | 150                                    |
| STPS15L30CDJF | PowerFLAT™ 5 x 6             | 2                | 30                                                  | 2 x 7.5                                     | 0.39                              | 7.5                                                  | -                                 | 75                                                            | 150                                    |

## POWER SCHOTTKY DIODES

| Part number | Package                                                              | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_o$ ) | Reverse current ( $I_R$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_J$ ) |
|-------------|----------------------------------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------------------------------|--------------------------------|
|             |                                                                      |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                | max (mA)                  | max (A)                                                 | max (°C)                       |
| STPS2030C   | TO-220AB                                                             | 2                | 30                                            | 2 x 10                              | 0.5                       | 10                                 | 1                         | 180                                                     | 150                            |
| STPS3030C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                     | 2                | 30                                            | 2 x 15                              | 0.49                      | 15                                 | 1                         | 250                                                     | 150                            |
| STPS30L30C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                     | 2                | 30                                            | 2 x 15                              | 0.46                      | 15                                 | 1.5                       | 220                                                     | 150                            |
| STPS41L30C  | D <sup>2</sup> PAK                                                   | 2                | 30                                            | 2 x 20                              | 0.48                      | 20                                 | 1.5                       | 220                                                     | 150                            |
| STPS60L30C  | TO-247                                                               | 2                | 30                                            | 2 x 30                              | 0.46                      | 30                                 | 4                         | 600                                                     | 150                            |
| 40 V        |                                                                      |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS0540Z   | SOD-123                                                              | 1                | 40                                            | 0.5                                 | 0.5                       | 0.5                                | 0.04                      | 5.5                                                     | 150                            |
| 1N5819      | DO-35                                                                | 1                | 40                                            | 1                                   | 0.5                       | 1                                  | 0.5                       | 25                                                      | 150                            |
| STPS140     | SMA, SMB                                                             | 1                | 40                                            | 1                                   | 0.55                      | 1                                  | 0.012                     | 60                                                      | 150                            |
| STPS140Z    | SOD-123                                                              | 1                | 40                                            | 1                                   | 0.55                      | 1                                  | 0.012                     | 5.5                                                     | 150                            |
| STPS1L40    | SMA, SMB                                                             | 1                | 40                                            | 1                                   | 0.5                       | 1                                  | 0.035                     | 60                                                      | 150                            |
| STPS1L40M   | STmite                                                               | 1                | 40                                            | 1                                   | 0.5                       | 1                                  | 0.035                     | 50                                                      | 150                            |
| STPS2L40    | SMB, SMBflat                                                         | 1                | 40                                            | 2                                   | 0.43                      | 2                                  | 0.22                      | 75                                                      | 150                            |
| STPS340     | DPAK, SMB, SMC                                                       | 1                | 40                                            | 3                                   | 0.63                      | 3                                  | 0.02                      | 75                                                      | 150                            |
| STPS3L40    | SMBflat, SMC                                                         | 1                | 40                                            | 3                                   | 0.5                       | 3                                  | 0.1                       | 75                                                      | 150                            |
| STPS5L40    | DO-201AD                                                             | 1                | 40                                            | 5                                   | 0.5                       | 5                                  | 0.2                       | 150                                                     | 150                            |
| STPS640C    | DPAK                                                                 | 2                | 40                                            | 2 x 3                               | 0.63                      | 3                                  | 0.1                       | 75                                                      | 150                            |
| STPS10L40C  | D <sup>2</sup> PAK, TO-220AB                                         | 2                | 40                                            | 2 x 5                               | 0.53                      | 5                                  | 0.2                       | 150                                                     | 150                            |
| STPS10L45C  | TO-220AB                                                             | 2                | 40                                            | 2 x 5                               | 0.53                      | 5                                  | 0.15                      | 150                                                     | 150                            |
| STPS20L45C  | D <sup>2</sup> PAK, TO-220AB, TO-220FPAC                             | 2                | 40                                            | 2 x 10                              | 0.55                      | 10                                 | 0.2                       | 180                                                     | 150                            |
| STPS30L45C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC, TO-247 | 2                | 40                                            | 2 x 15                              | 0.55                      | 15                                 | 0.4                       | 220                                                     | 150                            |
| 45 V        |                                                                      |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS745     | D <sup>2</sup> PAK, TO-220AC, TO-220FPAC                             | 1                | 45                                            | 7                                   | 0.57                      | 7.5                                | 0.1                       | 150                                                     | 175                            |
| STPS1045B   | DPAK                                                                 | 1                | 45                                            | 10                                  | 0.63                      | 10                                 | 0.1                       | 75                                                      | 175                            |
| STPS1045DEE | PowerFLAT™ 3.3 x 3.3                                                 | 1                | 45                                            | 10                                  | 0.59                      | 10                                 | 0.2                       | 100                                                     | 175                            |
| STPS1045FD  | TO-220AC, TO-220FPAC                                                 | 1                | 45                                            | 10                                  | 0.84                      | 20                                 | 0.1                       | 180                                                     | 175                            |
| STPS2045CH  | IPAK                                                                 | 2                | 45                                            | 2 x 5                               | 0.84                      | 20                                 | 0.1                       | 150                                                     | 175                            |
| STPS1545    | D <sup>2</sup> PAK, TO-220AC, TO-220FPAC                             | 1                | 45                                            | 15                                  | 0.84                      | 15                                 | 0.2                       | 220                                                     | 175                            |

## POWER SCHOTTKY DIODES

| Part number | Package                                                            | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_o$ ) | Reverse current ( $I_R$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_j$ ) |
|-------------|--------------------------------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------------------------------|--------------------------------|
|             |                                                                    |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                | max (mA)                  | max (A)                                                 | max (°C)                       |
| STPS1545C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                   | 2                | 45                                            | 2 x 7.5                             | 0.84                      | 15                                 | 0.1                       | 150                                                     | 175                            |
| STPS15L45C  | DPAK                                                               | 2                | 45                                            | 2 x 7.5                             | 0.52                      | 7.5                                | 1                         | 75                                                      | 150                            |
| STPS2045C   | D <sup>2</sup> PAK, TO-220AB, TO-220FPAC                           | 2                | 45                                            | 2 x 10                              | 0.84                      | 20                                 | 0.1                       | 180                                                     | 175                            |
| STPS2545C   | D <sup>2</sup> PAK, TO-220AB                                       | 2                | 45                                            | 2 x 12.5                            | 0.84                      | 25                                 | 0.125                     | 200                                                     | 175                            |
| STPS3045C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-247, TOP3 Ins | 2                | 45                                            | 2 x 15                              | 0.84                      | 30                                 | 0.2                       | 220                                                     | 175                            |
| STPS3045DJF | PowerFLAT™ 5 x 6                                                   | 1                | 45                                            | 30                                  | 0.64                      | 30                                 | 0.3                       | 200                                                     | 150                            |
| STPS4045C   | TO-247                                                             | 2                | 45                                            | 2 x 20                              | 0.76                      | 20                                 | 0.2                       | 220                                                     | 175                            |
| STPS40L45C  | D <sup>2</sup> PAK, TO-220AB, TO-247                               | 2                | 45                                            | 2 x 20                              | 0.53                      | 20                                 | 0.6                       | 230                                                     | 150                            |
| STPS41L45C  | D <sup>2</sup> PAK                                                 | 2                | 45                                            | 2 x 20                              | 0.53                      | 20                                 | 1.2                       | 220                                                     | 150                            |
| STPS5045S   | D <sup>2</sup> PAK                                                 | 1                | 45                                            | 50                                  | 0.56                      | 50                                 | 0.3                       | 600                                                     | 200                            |
| STPS6045C   | TO-247                                                             | 2                | 45                                            | 2 x 30                              | 0.84                      | 60                                 | 0.5                       | 400                                                     | 175                            |
| STPS60L45C  | TO-247                                                             | 2                | 45                                            | 2 x 30                              | 0.55                      | 30                                 | 1.5                       | 600                                                     | 150                            |
| STPS61L45C  | TO-220AB, TO-247                                                   | 2                | 45                                            | 2 x 30                              | 0.56                      | 30                                 | 1.5                       | 400                                                     | 150                            |
| STPS12045   | ISOTOP                                                             | 2                | 45                                            | 2 x 60                              | 0.91                      | 120                                | 1                         | 900                                                     | 150                            |
| STPS16045   | ISOTOP                                                             | 2                | 45                                            | 2 x 80                              | 0.95                      | 160                                | 1                         | 900                                                     | 150                            |
| STPS24045   | ISOTOP                                                             | 2                | 45                                            | 2 x 120                             | 0.91                      | 240                                | 2                         | 1500                                                    | 150                            |
| 60 V        |                                                                    |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS0560Z   | SOD-123                                                            | 1                | 60                                            | 0.5                                 | 0.53                      | 0.5                                | 0.05                      | 5.5                                                     | 150                            |
| STPS160     | SMA, SMB                                                           | 1                | 60                                            | 1                                   | 0.67                      | 1                                  | 0.004                     | 75                                                      | 150                            |
| STPS1L60    | DO-35, SMA                                                         | 1                | 60                                            | 1                                   | 0.57                      | 1                                  | 0.05                      | 40                                                      | 150                            |
| STPS2L60    | DO-35, SMA                                                         | 1                | 60                                            | 2                                   | 0.6                       | 2                                  | 0.1                       | 75                                                      | 150                            |
| STPS3L60    | DO-15, DO-201AD, SMB                                               | 1                | 60                                            | 3                                   | 0.62                      | 3                                  | 0.15                      | 100                                                     | 150                            |
| STPS3L60S   | SMC                                                                | 1                | 60                                            | 3                                   | 0.65                      | 3                                  | 0.15                      | 75                                                      | 150                            |
| STPS5L60    | DO-201AD, SMC                                                      | 1                | 60                                            | 5                                   | 0.52                      | 5                                  | 0.22                      | 150                                                     | 150                            |
| STPS660CB   | DPAK                                                               | 2                | 60                                            | 2 x 3                               | 0.65                      | 3                                  | 0.03                      | 50                                                      | 125                            |
| STPS10L60   | TO-220AC                                                           | 1                | 60                                            | 10                                  | 0.6                       | 10                                 | 0.35                      | 220                                                     | 150                            |
| STPS10L60C  | TO-220FPAC                                                         | 2                | 60                                            | 2 x 5                               | 0.55                      | 5                                  | 0.22                      | 180                                                     | 150                            |
| STPS15L60C  | DPAK                                                               | 2                | 60                                            | 2 x 7.5                             | 0.62                      | 7.5                                | 0.2                       | 75                                                      | 150                            |
| STPS2060C   | TO-220AB                                                           | 2                | 60                                            | 2 x 10                              | 0.8                       | 10                                 | 0.15                      | 200                                                     | 150                            |
| STPS20L60C  | D <sup>2</sup> PAK, TO-220AB                                       | 2                | 60                                            | 2 x 10                              | 0.6                       | 10                                 | 0.35                      | 220                                                     | 150                            |



## POWER SCHOTTKY DIODES

| Part number  | Package                                                                         | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_o$ ) | Reverse current ( $I_R$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_J$ ) |
|--------------|---------------------------------------------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------------------------------|--------------------------------|
|              |                                                                                 |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                | max (mA)                  | max (A)                                                 | max (°C)                       |
| STPS20M60    | TO-220AC                                                                        | 1                | 60                                            | 20                                  | 0.585                     | 20                                 | 0.13                      | 400                                                     | 150                            |
| STPS20M60C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                | 2                | 60                                            | 2 x 10                              | 0.57                      | 10                                 | 0.065                     | 300                                                     | 150                            |
| STPS20M60S   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                | 1                | 60                                            | 20                                  | 0.57                      | 20                                 | 0.13                      | 600                                                     | 150                            |
| STPS20SM60   | TO-220AC                                                                        | 1                | 60                                            | 20                                  | 0.6                       | 20                                 | 0.085                     | 400                                                     | 150                            |
| STPS20SM60C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                    | 2                | 60                                            | 2 x 10                              | 0.64                      | 10                                 | 0.04                      | 220                                                     | 150                            |
| STPS20SM60S  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                | 1                | 60                                            | 20                                  | 0.6                       | 20                                 | 0.085                     | 400                                                     | 150                            |
| STPS3060C    | TO-247                                                                          | 2                | 60                                            | 2 x 15                              | 0.85                      | 15                                 | 0.15                      | 200                                                     | 150                            |
| STPS30H60C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC, TO-247            | 2                | 60                                            | 2 x 15                              | 0.66                      | 15                                 | 0.15                      | 250                                                     | 175                            |
| STPS30L60C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220AB narrow leads, TO-247 | 2                | 60                                            | 2 x 15                              | 0.6                       | 15                                 | 0.48                      | 230                                                     | 150                            |
| STPS30M60    | TO-220AC                                                                        | 1                | 60                                            | 30                                  | 0.52                      | 30                                 | 0.165                     | 450                                                     | 150                            |
| STPS30M60C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                | 2                | 60                                            | 2 x 15                              | 0.585                     | 15                                 | 0.085                     | 400                                                     | 150                            |
| STPS30M60DJF | PowerFLAT™ 5 x 6                                                                | 1                | 60                                            | 30                                  | 0.72                      | 30                                 | 0.165                     | 60                                                      | 150                            |
| STPS30M60S   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                | 1                | 60                                            | 30                                  | 0.515                     | 30                                 | 0.165                     | 600                                                     | 150                            |
| STPS30SM60   | TO-220AC                                                                        | 1                | 60                                            | 30                                  | 0.635                     | 30                                 | 0.135                     | 400                                                     | 150                            |
| STPS30SM60C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                | 2                | 60                                            | 2 x 15                              | 0.62                      | 15                                 | 0.065                     | 300                                                     | 150                            |
| STPS30SM60S  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                | 1                | 60                                            | 30                                  | 0.615                     | 30                                 | 0.135                     | 600                                                     | 150                            |
| STPS40M60C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                | 2                | 60                                            | 2 x 20                              | 0.595                     | 20                                 | 0.11                      | 220                                                     | 150                            |
| STPS40SM60C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                | 2                | 60                                            | 2 x 20                              | 0.62                      | 20                                 | 0.09                      | 400                                                     | 150                            |
| STPS41L60C   | D <sup>2</sup> PAK, TO-220AB                                                    | 2                | 60                                            | 2 x 20                              | 0.6                       | 20                                 | 0.6                       | 22                                                      | 150                            |
| STPS61L60C   | TO-220AB, TO-247                                                                | 2                | 60                                            | 2 x 30                              | 0.66                      | 30                                 | 0.8                       | 400                                                     | 150                            |
| STPS80L60C   | Max247                                                                          | 2                | 60                                            | 2 x 40                              | 0.57                      | 40                                 | 1.8                       | 400                                                     | 150                            |
| 80 V         |                                                                                 |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS10M80C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                    | 2                | 80                                            | 2 x 5                               | 0.705                     | 5                                  | 0.02                      | 150                                                     | 175                            |
| STPS10SM80C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                    | 2                | 80                                            | 2 x 5                               | 0.745                     | 5                                  | 0.015                     | 150                                                     | 175                            |
| STPS15M80C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                    | 2                | 80                                            | 2 x 7.5                             | 0.725                     | 7.5                                | 0.025                     | 220                                                     | 175                            |

## POWER SCHOTTKY DIODES

| Part number  | Package                                                                             | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_o$ ) | Reverse current ( $I_R$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_J$ ) |
|--------------|-------------------------------------------------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------------------------------|--------------------------------|
|              |                                                                                     |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                | max (mA)                  | max (A)                                                 | max (°C)                       |
| STPS15SM80C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                        | 2                | 80                                            | 2 x 7.5                             | 0.78                      | 7.5                                | 0.02                      | 150                                                     | 175                            |
| STPS20M80C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                        | 2                | 80                                            | 2 x 10                              | 0.74                      | 10                                 | 0.03                      | 220                                                     | 175                            |
| STPS20SM80C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                        | 2                | 80                                            | 2 x 10                              | 0.78                      | 10                                 | 0.025                     | 220                                                     | 175                            |
| STPS30M80C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                        | 2                | 80                                            | 2 x 15                              | 0.79                      | 15                                 | 0.04                      | 150                                                     | 175                            |
| STPS30SM80C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                        | 2                | 80                                            | 2 x 15                              | 0.79                      | 15                                 | 0.04                      | 220                                                     | 175                            |
| STPS40M80C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB                                    | 2                | 80                                            | 2 x 20                              | 0.735                     | 20                                 | 0.065                     | 150                                                     | 175                            |
| STPS40SM80C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                        | 2                | 80                                            | 2 x 20                              | 0.8                       | 20                                 | 0.05                      | 150                                                     | 175                            |
| 100 V        |                                                                                     |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS1H100    | SMA, SMAflat, SMB                                                                   | 1                | 100                                           | 1                                   | 0.77                      | 1                                  | 0.004                     | 50                                                      | 175                            |
| STPS1H100MF  | STmiteFlat                                                                          | 1                | 100                                           | 1                                   | 0.77                      | 1                                  | 0.004                     | 50                                                      | 175                            |
| STPS2H100    | SMA, SMB, SMBflat                                                                   | 1                | 100                                           | 2                                   | 0.79                      | 2                                  | 0.001                     | 75                                                      | 175                            |
| STPS2H100RL  | DO-35                                                                               | 1                | 100                                           | 2                                   | 0.86                      | 2                                  | 0.001                     | 50                                                      | 175                            |
| STPS3H100    | SMB, SMBflat                                                                        | 1                | 100                                           | 3                                   | 0.84                      | 3                                  | 0.001                     | 75                                                      | 175                            |
| STPS5H100    | DPAK, IPAK                                                                          | 1                | 100                                           | 5                                   | 0.79                      | 5                                  | 0.004                     | 75                                                      | 175                            |
| STPS6M100DEE | PowerFLAT™ 3.3 x 3.3                                                                | 1                | 100                                           | 6                                   | 0.78                      | 6                                  | 0.003                     | 100                                                     | 150                            |
| STPS8H100    | D <sup>2</sup> PAK, TO-220AC, TO-220FPAC                                            | 1                | 100                                           | 8                                   | 0.71                      | 8                                  | 0.005                     | 250                                                     | 175                            |
| STPS8H100DEE | PowerFLAT™ 3.3 x 3.3                                                                | 1                | 100                                           | 8                                   | 0.82                      | 8                                  | 0.005                     | 100                                                     | 175                            |
| STPS10H100   | D <sup>2</sup> PAK, TO-220AB, TO-220FPAC, TO-220AB narrow leads                     | 2                | 100                                           | 2 x 5                               | 0.73                      | 5                                  | 0.004                     | 180                                                     | 175                            |
| STPS15H100C  | DPAK                                                                                | 2                | 100                                           | 2 x 7.5                             | 0.8                       | 7.5                                | 0.003                     | 75                                                      | 175                            |
| STPS16H100C  | D <sup>2</sup> PAK                                                                  | 2                | 100                                           | 2 x 8                               | 0.77                      | 8                                  | 0.004                     | 200                                                     | 175                            |
| STPS20100    | TO-220AB                                                                            | 2                | 100                                           | 2 x 10                              | 0.95                      | 20                                 | 0.15                      | 200                                                     | 175                            |
| STPS20H100C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC, TO-220AB narrow leads | 2                | 100                                           | 2 x 10                              | 0.77                      | 10                                 | 0.005                     | 250                                                     | 175                            |

## POWER SCHOTTKY DIODES

| Part number   | Package                                                      | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_o$ ) | Reverse current ( $I_R$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_J$ ) |
|---------------|--------------------------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------------------------------|--------------------------------|
|               |                                                              |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                | max (mA)                  | max (A)                                                 | max (°C)                       |
| STPS20M100S   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC | 1                | 100                                           | 20                                  | 0.85                      | 20                                 | 0.04                      | 530                                                     | 150                            |
| STPS20S100C   | I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                     | 2                | 100                                           | 2 x 10                              | 0.85                      | 10                                 | 0.004                     | 180                                                     | 175                            |
| STPS20SM100S  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC | 1                | 100                                           | 20                                  | 0.9                       | 20                                 | 0.03                      | 350                                                     | 150                            |
| STPS30100ST   | TO-220AB                                                     | 1                | 100                                           | 30                                  | 0.8                       | 30                                 | 0.175                     | 300                                                     | 150                            |
| STPS30H100C   | I <sup>2</sup> PAK, TO-220AB, TO-220AB narrow leads, TO-247  | 2                | 100                                           | 2 x 15                              | 0.8                       | 15                                 | 0.005                     | 250                                                     | 175                            |
| STPS30H100DJF | PowerFLAT™ 5 x 6                                             | 1                | 100                                           | 30                                  | 0.84                      | 30                                 | 6.5                       | 250                                                     | 150                            |
| STPS30M100DJF | PowerFLAT™ 5 x 6                                             | 1                | 100                                           | 30                                  | 0.96                      | 30                                 | 0.1                       | 200                                                     | 150                            |
| STPS30M100S   | I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                     | 1                | 100                                           | 30                                  | 0.8                       | 30                                 | 0.175                     | 300                                                     | 150                            |
| STPS30SM100S  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC | 1                | 100                                           | 30                                  | 0.87                      | 30                                 | 0.045                     | 300                                                     | 150                            |
| STPS40H100CW  | TO-247                                                       | 2                | 100                                           | 2 x 20                              | 0.73                      | 20                                 | 0.01                      | 300                                                     | 175                            |
| STPS40M100C   | I <sup>2</sup> PAK, TO-220AB                                 | 2                | 100                                           | 2 x 20                              | 0.78                      | 20                                 | 0.07                      | 530                                                     | 150                            |
| STPS40SM100C  | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB             | 2                | 100                                           | 2 x 20                              | 0.81                      | 20                                 | 0.045                     | 230                                                     | 150                            |
| STPS41H100C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB             | 2                | 100                                           | 2 x 20                              | 0.8                       | 20                                 | 0.01                      | 220                                                     | 175                            |
| STPS60H100C   | TO-220AB                                                     | 2                | 100                                           | 2 x 30                              | 0.84                      | 30                                 | 0.01                      | 300                                                     | 175                            |
| STPS61H100C   | TO-247                                                       | 2                | 100                                           | 2 x 30                              | 0.79                      | 30                                 | 0.016                     | 450                                                     | 175                            |
| STPS80H100    | ISOTOP                                                       | 2                | 100                                           | 2 x 40                              | 0.78                      | 40                                 | 0.02                      | 700                                                     | 150                            |
| STPS80H100C   | Max247                                                       | 2                | 100                                           | 2 x 40                              | 0.8                       | 40                                 | 0.02                      | 400                                                     | 175                            |
| STPS160H100   | ISOTOP                                                       | 2                | 100                                           | 2 x 80                              | 0.8                       | 80                                 | 0.04                      | 1000                                                    | 150                            |
| 120 V         |                                                              |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS10120C    | TO-220AB, TO-220FPAC                                         | 2                | 120                                           | 2 x 5                               | 0.85                      | 5                                  | 0.006                     | 120                                                     | 175                            |
| STPS20120C    | DPAK, I <sup>2</sup> PAK, TO-220AB, TO-220AB narrow leads    | 2                | 120                                           | 2 x 10                              | 0.92                      | 10                                 | 0.01                      | 150                                                     | 175                            |
| STPS20120D    | TO-220AC                                                     | 1                | 120                                           | 20                                  | 0.93                      | 20                                 | 0.02                      | 200                                                     | 175                            |
| STPS20L120C   | TO-220FPAC                                                   | 2                | 120                                           | 2 x 10                              | 0.86                      | 10                                 | 0.12                      | 200                                                     | 150                            |
| STPS20M120S   | I <sup>2</sup> PAK, TO-220AB narrow leads                    | 1                | 120                                           | 20                                  | 0.84                      | 20                                 | 0.275                     | 240                                                     | 150                            |

## POWER SCHOTTKY DIODES

| Part number  | Package                                                      | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_o$ ) | Reverse current ( $I_R$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_J$ ) |
|--------------|--------------------------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------------------------------|--------------------------------|
|              |                                                              |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                | max (mA)                  | max (A)                                                 | max (°C)                       |
| STPS20SM120S | I <sup>2</sup> PAK, TO-220AB narrow leads                    | 1                | 120                                           | 20                                  | 0.89                      | 20                                 | 0.21                      | 220                                                     | 150                            |
| STPS40M120C  | I <sup>2</sup> PAK, TO-220AB, TO-220AB narrow leads          | 2                | 120                                           | 2 x 10                              | 0.79                      | 20                                 | 0.37                      | 220                                                     | 150                            |
| STPS40SM120C | I <sup>2</sup> PAK, TO-220AB, TO-220AB narrow leads          | 2                | 120                                           | 2 x 10                              | 0.83                      | 20                                 | 0.275                     | 210                                                     | 150                            |
| STPS30120C   | I <sup>2</sup> PAK, TO-220AB, TO-220AB narrow leads          | 2                | 120                                           | 2 x 15                              | 0.92                      | 15                                 | 0.015                     | 180                                                     | 175                            |
| STPS30120DJF | PowerFLAT™ 5 x 6                                             | 1                | 120                                           | 30                                  | 0.92                      | 30                                 | 0.035                     | 200                                                     | 150                            |
| STPS30L120C  | I <sup>2</sup> PAK, TO-220AB, TO-220FPAC                     | 2                | 120                                           | 2 x 15                              | 0.88                      | 15                                 | 0.2                       | 220                                                     | 150                            |
| STPS30M120S  | I <sup>2</sup> PAK, TO-220AB narrow leads                    | 1                | 120                                           | 30                                  | 0.9                       | 30                                 | 0.345                     | 260                                                     | 150                            |
| STPS30SM120S | I <sup>2</sup> PAK, TO-220AB narrow leads                    | 1                | 120                                           | 30                                  | 0.95                      | 30                                 | 0.275                     | 240                                                     | 150                            |
| STPS40120C   | TO-220AB                                                     | 2                | 120                                           | 2 x 20                              | 0.9                       | 20                                 | 0.025                     | 200                                                     | 175                            |
| 150 V        |                                                              |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS1150     | DO-35, SMA                                                   | 1                | 150                                           | 1                                   | 0.82                      | 1                                  | 0.001                     | 50                                                      | 175                            |
| STPS2150     | DO-15, SMA                                                   | 1                | 150                                           | 2                                   | 0.82                      | 2                                  | 0.002                     | 75                                                      | 175                            |
| STPS3150     | DO-201AD, SMB, SMBflat                                       | 1                | 150                                           | 3                                   | 0.82                      | 3                                  | 0.002                     | 100                                                     | 175                            |
| STPS10150C   | D <sup>2</sup> PAK, TO-220AB, TO-220FPAC                     | 2                | 150                                           | 2 x 5                               | 0.92                      | 5                                  | 0.002                     | 120                                                     | 175                            |
| STPS16150C   | TO-220AB                                                     | 2                | 150                                           | 2 x 8                               | 0.92                      | 8                                  | 0.003                     | 150                                                     | 175                            |
| STPS20150C   | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC | 2                | 150                                           | 2 x 10                              | 0.92                      | 10                                 | 0.005                     | 180                                                     | 175                            |
| STPS30150C   | D <sup>2</sup> PAK, TO-220AB, TO-220FPAC, TO-247             | 2                | 150                                           | 2 x 15                              | 0.92                      | 15                                 | 0.007                     | 220                                                     | 175                            |
| STPS40150C   | D <sup>2</sup> PAK, TO-220AB, TO-247                         | 2                | 150                                           | 2 x 20                              | 0.91                      | 20                                 | 0.008                     | 250                                                     | 175                            |
| STPS60150C   | TO-220AB                                                     | 2                | 150                                           | 2 x 30                              | 0.94                      | 30                                 | 0.015                     | 270                                                     | 175                            |
| STPS61150C   | TO-247                                                       | 2                | 150                                           | 2 x 30                              | 0.84                      | 30                                 | 0.02                      | 500                                                     | 175                            |
| STPS80150C   | TO-247                                                       | 2                | 150                                           | 2 x 40                              | 0.84                      | 40                                 | 0.03                      | 500                                                     | 175                            |

## POWER SCHOTTKY DIODES

| Part number   | Package                     | Number of diodes | Repetitive peak reverse voltage (V <sub>RRM</sub> ) | Average rectified current (I <sub>F</sub> ) | Forward voltage (V <sub>F</sub> ) | V <sub>F</sub> measure condition (@ I <sub>F</sub> ) | Reverse current (I <sub>R</sub> ) | Non-repetitive peak forward surge current (I <sub>FSM</sub> ) | Junction temperature (T <sub>J</sub> ) |
|---------------|-----------------------------|------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------|------------------------------------------------------|-----------------------------------|---------------------------------------------------------------|----------------------------------------|
|               |                             |                  | max (V)                                             | max (A)                                     | max (V)                           | (A)                                                  | max (mA)                          | max (A)                                                       | max (°C)                               |
| 170 V         |                             |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| STPS8170DEE   | PowerFLAT™ 3.3 x 3.3        | 1                | 170                                                 | 8                                           | 0.9                               | 8                                                    | 0.015                             | 100                                                           | 175                                    |
| STPS10170C    | D²PAK, DPAK                 | 2                | 170                                                 | 2 x 5                                       | 0.92                              | 5                                                    | 0.01                              | 120                                                           | 175                                    |
| STPS16170C    | D²PAK, DPAK, I²PAK          | 2                | 170                                                 | 2 x 8                                       | 0.92                              | 8                                                    | 0.015                             | 150                                                           | 175                                    |
| STPS20170C    | D²PAK, TO-220AB, TO-220FPAC | 2                | 170                                                 | 2 x 10                                      | 0.92                              | 10                                                   | 0.015                             | 180                                                           | 175                                    |
| STPS30170C    | D²PAK, TO-220FPAC, TO-247   | 2                | 170                                                 | 2 x 15                                      | 0.92                              | 15                                                   | 0.02                              | 220                                                           | 175                                    |
| STPS30170DJF  | PowerFLAT™ 5 x 6            | 1                | 170                                                 | 30                                          | 0.95                              | 30                                                   | 0.015                             | 200                                                           | 150                                    |
| STPS40170C    | D²PAK, TO-220AB, TO-247     | 2                | 170                                                 | 2 x 20                                      | 0.92                              | 20                                                   | 0.03                              | 250                                                           | 175                                    |
| STPS60170C    | TO-220AB                    | 2                | 170                                                 | 2 x 30                                      | 0.94                              | 30                                                   | 0.035                             | 270                                                           | 175                                    |
| STPS61170C    | TO-247                      | 2                | 170                                                 | 2 x 30                                      | 0.84                              | 30                                                   | 0.06                              | 500                                                           | 175                                    |
| STPS80170C    | TO-247                      | 2                | 170                                                 | 2 x 40                                      | 0.84                              | 40                                                   | 0.08                              | 500                                                           | 175                                    |
| STPS200170TV1 | ISOTOP                      | 2                | 170                                                 | 2 x 100                                     | 0.85                              | 100                                                  | 0.2                               | 700                                                           | 150                                    |
| 200 V         |                             |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| STPS60SM200C  | TO-247                      | 2                | 200                                                 | 2 x 30                                      | 0.83                              | 30                                                   | 0.05                              | 500                                                           | 175                                    |

# Silicon-carbide diodes

| Part number                                     | Package                            | Number of diodes | Repetitive peak reverse voltage (V <sub>RRM</sub> ) | Average rectified current (I <sub>A</sub> ) | Forward voltage (V <sub>F</sub> ) | V <sub>F</sub> measure condition (@ I <sub>F</sub> ) | Reverse current (I <sub>R</sub> ) | Total capacitive charge (Qc) | Non-repetitive peak forward surge current (I <sub>FSM</sub> ) | Junction temperature (T <sub>J</sub> ) |
|-------------------------------------------------|------------------------------------|------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------|------------------------------------------------------|-----------------------------------|------------------------------|---------------------------------------------------------------|----------------------------------------|
|                                                 |                                    |                  | max (V)                                             | max (A)                                     | max (V)                           | (A)                                                  | max (mA)                          | (nC)                         | max (A)                                                       | max (°C)                               |
| 600 V first generation silicon-carbide diodes   |                                    |                  |                                                     |                                             |                                   |                                                      |                                   |                              |                                                               |                                        |
| STPSC406                                        | TO-220AC, DPAK                     | 1                | 600                                                 | 4                                           | 1.9                               | 4                                                    | 0.05                              | 3                            | 14                                                            | 175                                    |
| STPSC606                                        | D <sup>2</sup> PAK, TO-220AC       | 1                | 600                                                 | 6                                           | 1.7                               | 6                                                    | 0.075                             | 6                            | 27                                                            | 175                                    |
| STPSC806                                        | D <sup>2</sup> PAK, TO-220AC       | 1                | 600                                                 | 8                                           | 1.7                               | 8                                                    | 0.1                               | 10                           | 30                                                            | 175                                    |
| STPSC1006                                       | D <sup>2</sup> PAK, TO-220AC       | 1                | 600                                                 | 10                                          | 1.7                               | 10                                                   | 0.15                              | 12                           | 40                                                            | 175                                    |
| STPSC1206                                       | TO-220AC                           | 1                | 600                                                 | 12                                          | 1.7                               | 12                                                   | 0.15                              | 12                           | 50                                                            | 175                                    |
| STPSC2006CW                                     | TO-247                             | 2                | 600                                                 | 2 x 10                                      | 1.7                               | 10                                                   | 0.15                              | 12                           | 40                                                            | 175                                    |
| 650 V second generation silicon-carbide diodes  |                                    |                  |                                                     |                                             |                                   |                                                      |                                   |                              |                                                               |                                        |
| STPSC4H065                                      | DPAK, TO-220AC                     | 1                | 650                                                 | 4                                           | 1.75                              | 4                                                    | 0.04                              | 12.6                         | 40                                                            | 175                                    |
| STPSC6H065                                      | D <sup>2</sup> PAK, TO-220AC, DPAK | 1                | 650                                                 | 6                                           | 1.75                              | 6                                                    | 0.06                              | 17.9                         | 60                                                            | 175                                    |
| STPSC8H065                                      | D <sup>2</sup> PAK, DPAK, TO-220AC | 1                | 650                                                 | 8                                           | 1.75                              | 8                                                    | 0.08                              | 23.5                         | 80                                                            | 175                                    |
| STPSC10H065 (*)                                 | D <sup>2</sup> PAK, TO-220AC, DPAK | 1                | 650                                                 | 10                                          | 1.75                              | 10                                                   | 0.1                               | 28.5                         | 100                                                           | 175                                    |
| STPSC12H065 (*)                                 | D <sup>2</sup> PAK, TO-220AC, DPAK | 1                | 650                                                 | 12                                          | 1.75                              | 12                                                   | 0.12                              | 36                           | 120                                                           | 175                                    |
| STPSC20H065C                                    | TO-220, TO-247                     | 2                | 650                                                 | 2 x 10                                      | 1.75                              | 10                                                   | 0.1                               | 28.5                         | 100                                                           | 175                                    |
| 1200 V second generation silicon-carbide diodes |                                    |                  |                                                     |                                             |                                   |                                                      |                                   |                              |                                                               |                                        |
| STPSC6H12 (*)                                   | DPAK-2L                            | 1                | 1200                                                | 6                                           | 1.65                              | 6                                                    | 0.4                               | 28                           | 36                                                            | 175                                    |

Notes :

(\*) Available in Q2-2013. The above paramaters are target ones.

## ULTRAFAST RECTIFIERS 200 V, 300 V AND 400 V

| Part number  | Package                                                            | Number of diodes | Repetitive peak reverse voltage (V <sub>RRM</sub> ) | Average rectified current (I <sub>V</sub> ) | Forward Voltage (V <sub>F</sub> ) | V <sub>F</sub> measure condition (@ I <sub>V</sub> ) | Reverse current (I <sub>R</sub> ) | Reverse recovery time (t <sub>rr</sub> ) | Non-repetitive peak forward surge current (I <sub>FSM</sub> ) | Junction temperature (T <sub>J</sub> ) |
|--------------|--------------------------------------------------------------------|------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------|------------------------------------------------------|-----------------------------------|------------------------------------------|---------------------------------------------------------------|----------------------------------------|
|              |                                                                    |                  | max (V)                                             | max (A)                                     | max (V)                           | (A)                                                  | max (mA)                          | max (ns)                                 | max (A)                                                       | max (°C)                               |
| 200 V        |                                                                    |                  |                                                     |                                             |                                   |                                                      |                                   |                                          |                                                               |                                        |
| STTH102      | DO-35, SMA                                                         | 1                | 200                                                 | 1                                           | 0.97                              | 1                                                    | 0.001                             | 20                                       | 40                                                            | 175                                    |
| STTH1R02     | DO-15, DO-35, SMA, SMB                                             | 1                | 200                                                 | 1                                           | 1                                 | 1.5                                                  | 0.003                             | 20                                       | 60                                                            | 175                                    |
| STTH2R02     | SMA, SMB                                                           | 1                | 200                                                 | 2                                           | 1                                 | 2                                                    | 0.003                             | 20                                       | 75                                                            | 175                                    |
| STTH3R02     | DO-15, DO-201AD, SMC                                               | 1                | 200                                                 | 3                                           | 1                                 | 3                                                    | 0.003                             | 20                                       | 75                                                            | 175                                    |
| STTH4R02     | DPAK, SMB, SMC                                                     | 1                | 200                                                 | 4                                           | 1.05                              | 4                                                    | 0.003                             | 20                                       | 70                                                            | 175                                    |
| STTH602C     | TO-220AB                                                           | 2                | 200                                                 | 2 x 3                                       | 1.1                               | 3                                                    | 0.003                             | 20                                       | 60                                                            | 175                                    |
| STTH802      | D <sup>2</sup> PAK, TO-220AC, DPAK, TO-220FPAC                     | 1                | 200                                                 | 8                                           | 1.05                              | 8                                                    | 0.006                             | 22                                       | 100                                                           | 175                                    |
| STTH802C     | DPAK                                                               | 2                | 200                                                 | 2 x 4                                       | 1.1                               | 4                                                    | 0.004                             | 20                                       | 50                                                            | 175                                    |
| STTH1002C    | D <sup>2</sup> PAK, DPAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC | 2                | 200                                                 | 2 x 5                                       | 1.1                               | 5                                                    | 0.005                             | 20                                       | 50                                                            | 175                                    |
| STTH20W02C   | TO-247                                                             | 2                | 200                                                 | 2 x 5                                       | 1.2                               | 10                                                   | 0.005                             | 25                                       | 60                                                            | 175                                    |
| STTH1202     | TO-220AC, TO-220AC Ins                                             | 1                | 200                                                 | 12                                          | 1.1                               | 12                                                   | 0.01                              | 24                                       | 100                                                           | 175                                    |
| STTH1302     | D <sup>2</sup> PAK                                                 | 2                | 200                                                 | 2 x 6.5                                     | 1.1                               | 6.5                                                  | 0.006                             | 25                                       | 70                                                            | 175                                    |
| STTH1502     | TO-220AC, TO-220AC Ins, TO-220FPAC                                 | 1                | 200                                                 | 15                                          | 1.1                               | 15                                                   | 0.001                             | 25                                       | 150                                                           | 175                                    |
| STTH1602C    | D <sup>2</sup> PAK, TO-220AB, TO-220FPAC                           | 2                | 200                                                 | 2 x 8                                       | 1.1                               | 8                                                    | 0.006                             | 26                                       | 80                                                            | 175                                    |
| STTH2002     | D <sup>2</sup> PAK, TO-220AC, TO-220AC Ins                         | 1                | 200                                                 | 20                                          | 1.1                               | 20                                                   | 0.01                              | 20                                       | 175                                                           | 175                                    |
| STTH2002C    | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC       | 2                | 200                                                 | 2 x 10                                      | 1.1                               | 10                                                   | 0.01                              | 27                                       | 90                                                            | 175                                    |
| STTH20W02C   | TO 247                                                             | 1                | 200                                                 | 2 x 10                                      | 1.4                               | 20                                                   | 0.005                             | 25                                       | 80                                                            | 175                                    |
| STTH3002     | D <sup>2</sup> PAK, DO-247, DOP3 Ins                               | 1                | 200                                                 | 30                                          | 1.05                              | 30                                                   | 0.02                              | 27                                       | 300                                                           | 175                                    |
| STTH3002C    | D <sup>2</sup> PAK, TO-220AB, TO-247                               | 2                | 200                                                 | 2 x 15                                      | 1.05                              | 15                                                   | 0.02                              | 22                                       | 180                                                           | 175                                    |
| STTH30R02DJF | PowerFLAT™ 5 x 6                                                   | 1                | 200                                                 | 30                                          | 0.95                              | 30                                                   | 0.01                              | 35                                       | 300                                                           | 175                                    |
| STTH30W02C   | TO 247                                                             | 1                | 200                                                 | 2 x 15                                      | 1.4                               | 30                                                   | 0.01                              | 25                                       | 140                                                           | 175                                    |
| STTH6002C    | TO-247, TOP3 Ins                                                   | 2                | 200                                                 | 2 x 30                                      | 1.05                              | 30                                                   | 0.03                              | 27                                       | 330                                                           | 175                                    |
| STTH60W02C   | TO-247                                                             | 2                | 200                                                 | 2 x 30                                      | 0.92                              | 30                                                   | 0.01                              | 30                                       | 200                                                           | 175                                    |

# ULTRAFAST RECTIFIERS 200 V, 300 V AND 400 V

| Part number   | Package                                                      | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward Voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_F$ ) | Reverse current ( $I_R$ ) | Reverse recovery time ( $t_{rr}$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_j$ ) |
|---------------|--------------------------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|------------------------------------|---------------------------------------------------------|--------------------------------|
|               |                                                              |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                | max (mA)                  | max (ns)                           | max (A)                                                 | max (°C)                       |
| STTH10002     | ISOTOP                                                       | 2                | 200                                           | 2 x 50                              | 1                         | 50                                 | 0.05                      | 30                                 | 750                                                     | 150                            |
| STTH20002TV   | ISOTOP                                                       | 2                | 200                                           | 2 x 100                             | 1.05                      | 100                                | 0.1                       | 50                                 | 1000                                                    | 150                            |
| 300 V         |                                                              |                  |                                               |                                     |                           |                                    |                           |                                    |                                                         |                                |
| STTH803       | D <sup>2</sup> PAK, TO-220AC                                 | 1                | 300                                           | 8                                   | 1.25                      | 8                                  | 0.02                      | 35                                 | 100                                                     | 175                            |
| STTH8R03      | TO-220AC                                                     | 1                | 300                                           | 8                                   | 1.8                       | 8                                  | 0.01                      | 30                                 | 80                                                      | 175                            |
| STTH8R03DJF   | PowerFLAT™ 5 x 6                                             | 1                | 300                                           | 8                                   | 1                         | 8                                  | 0.04                      | 35                                 | 280                                                     | 175                            |
| STTH1003S     | DPAK                                                         | 1                | 300                                           | 10                                  | 1.3                       | 10                                 | 0.01                      | 13                                 | 100                                                     | 175                            |
| STTH20L03C    | D <sup>2</sup> PAK, TO-220AB                                 | 2                | 300                                           | 2 x 10                              | 1.2                       | 10                                 | 0.01                      | 35                                 | 150                                                     | 175                            |
| STTH30W03C    | TO-247                                                       | 2                | 300                                           | 2 x 15                              | 1.4                       | 15                                 | 0.02                      | 25                                 | 120                                                     | 175                            |
| STTH2003      | D <sup>2</sup> PAK, I <sup>2</sup> PAK, TO-220AB, TO-220FPAC | 2                | 300                                           | 2 x 10                              | 1.25                      | 10                                 | 0.02                      | 25                                 | 110                                                     | 175                            |
| STTH3003      | TO-247                                                       | 2                | 300                                           | 2 x 15                              | 1.25                      | 15                                 | 0.04                      | 30                                 | 140                                                     | 175                            |
| STTH30R03     | D <sup>2</sup> PAK, TO-247                                   | 2                | 300                                           | 2 x 15                              | 1.9                       | 15                                 | 0.02                      | 35                                 | 120                                                     | 175                            |
| STTH6003C     | TO-247                                                       | 2                | 300                                           | 2 x 30                              | 1.25                      | 30                                 | 0.06                      | 40                                 | 300                                                     | 175                            |
| STTH60W03C    | TO-247                                                       | 2                | 300                                           | 2 x 30                              | 1.45                      | 30                                 | 0.02                      | 35                                 | 280                                                     | 175                            |
| STTH40P03S    | TO-247                                                       | 1                | 300                                           | 40                                  | 1.8                       | 40                                 | 0.05                      | 45                                 | 120                                                     | 175                            |
| STTH60P03S    | TO-247                                                       | 1                | 300                                           | 60                                  | 1.5                       | 30                                 | 0.1                       | 50                                 | 250                                                     | 175                            |
| STTH8003      | Max247                                                       | 2                | 300                                           | 2 x 40                              | 1.25                      | 40                                 | 0.08                      | 50                                 | 400                                                     | 175                            |
| STTH12003     | ISOTOP                                                       | 2                | 300                                           | 2 x 60                              | 1.25                      | 60                                 | 0.12                      | 55                                 | 600                                                     | 150                            |
| STTH16003     | ISOTOP                                                       | 2                | 300                                           | 2 x 80                              | 1.2                       | 80                                 | 0.2                       | 60                                 | 800                                                     | 150                            |
| STTH20003     | ISOTOP                                                       | 2                | 300                                           | 2 x 100                             | 1.2                       | 100                                | 0.2                       | 90                                 | 1000                                                    | 150                            |
| STTH200W03TV1 | ISOTOP                                                       | 2                | 300                                           | 2 x 100                             | 1.15                      | 100                                | 0.1                       | 50                                 | 800                                                     | 150                            |
| 400 V         |                                                              |                  |                                               |                                     |                           |                                    |                           |                                    |                                                         |                                |
| STTH1R04      | DO-15, DO-35, SMA, SMB                                       | 1                | 400                                           | 1                                   | 1.5                       | 1                                  | 0.005                     | 20                                 | 30                                                      | 175                            |
| STTH3R04      | DO-15, DO-201AD, SMB, SMC                                    | 1                | 400                                           | 3                                   | 1.5                       | 3                                  | 0.005                     | 25                                 | 60                                                      | 175                            |
| STTH5L04DEE   | PowerFLAT™ 3.3 x 3.3                                         | 1                | 400                                           | 5                                   | 1.25                      | 5                                  | 0.003                     | 60                                 | 60                                                      | 150                            |
| STTH8R04      | D <sup>2</sup> PAK, TO-220AC, TO-220AC Ins                   | 1                | 400                                           | 8                                   | 1.5                       | 8                                  | 0.01                      | 35                                 | 120                                                     | 175                            |
| STTH10R04     | D <sup>2</sup> PAK                                           | 1                | 400                                           | 10                                  | 1.7                       | 10                                 | 0.001                     | 40                                 | 100                                                     | 175                            |
| STTH16R04C    | D <sup>2</sup> PAK, TO-220AB                                 | 2                | 400                                           | 2 x 8                               | 1.5                       | 8                                  | 0.01                      | 35                                 | 120                                                     | 175                            |



## ULTRAFAST RECTIFIERS 200 V, 300 V AND 400 V

| Part number   | Package                                          | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward Voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_o$ ) | Reverse current ( $I_R$ ) | Reverse recovery time ( $t_{rr}$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_j$ ) |
|---------------|--------------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|------------------------------------|---------------------------------------------------------|--------------------------------|
|               |                                                  |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                | max (mA)                  | max (ns)                           | max (A)                                                 | max (°C)                       |
| STTH20R04     | D <sup>2</sup> PAK, TO-220AC, DO-247, TO-220FPAC | 1                | 400                                           | 20                                  | 1.7                       | 20                                 | 0.02                      | 45                                 | 150                                                     | 175                            |
| STTH30R04     | D <sup>2</sup> PAK, TO-220AC, DO-247, DOP3 Ins   | 1                | 400                                           | 30                                  | 1.45                      | 30                                 | 0.015                     | 50                                 | 300                                                     | 175                            |
| STTH6004W     | DO-247                                           | 1                | 400                                           | 60                                  | 1.2                       | 60                                 | 0.05                      | 50                                 | 600                                                     | 175                            |
| STTH60R04     | DO-247                                           | 1                | 400                                           | 60                                  | 1.5                       | 60                                 | 0.06                      | 45                                 | 650                                                     | 175                            |
| STTH61R04TV   | ISOTOP                                           | 2                | 400                                           | 2 x 30                              | 1.45                      | 30                                 | 0.015                     | 35                                 | 350                                                     | 150                            |
| STTH61W04S    | TO-247                                           | 1                | 400                                           | 60                                  | 1.15                      | 30                                 | 0.02                      | 55                                 | 280                                                     | 175                            |
| STTH100W04C   | TO-247                                           | 2                | 400                                           | 2 x 50                              | 1.2                       | 50                                 | 0.025                     | 50                                 | 350                                                     | 175                            |
| STTH120R04TV  | ISOTOP                                           | 2                | 400                                           | 2 x 60                              | 1.5                       | 60                                 | 0.06                      | 55                                 | 700                                                     | 150                            |
| STTH20004TV1  | ISOTOP                                           | 2                | 400                                           | 2 x 100                             | 1.2                       | 100                                | 0.1                       | 100                                | 900                                                     | 150                            |
| STTH200L04TV1 | ISOTOP                                           | 2                | 400                                           | 2 x 100                             | 1.2                       | 100                                | 0.1                       | 100                                | 900                                                     | 150                            |
| STTH200R04TV  | ISOTOP                                           | 2                | 400                                           | 2 x 100                             | 1.35                      | 100                                | 0.08                      | 70                                 | 1000                                                    | 150                            |
| STTH200W04TV1 | ISOTOP                                           | 2                | 400                                           | 2 x 100                             | 1.55                      | 100                                | 0.4                       | 55                                 | 800                                                     | 150                            |

# ULTRAFAST RECTIFIERS 600 V

| Part number  | Package                                                                    | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_A$ ) | Forward voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_F$ ) spec | Reverse current ( $I_R$ ) | Reverse recovery time ( $t_r$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_J$ ) |
|--------------|----------------------------------------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|-----------------------------------------|---------------------------|---------------------------------|---------------------------------------------------------|--------------------------------|
|              |                                                                            |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                     | max (mA)                  | max (ns)                        | max (A)                                                 | max (°C)                       |
| STTH1L06     | DO-35, SMA, SMB                                                            | 1                | 600                                           | 1                                   | 1.3                       | 1                                       | 0.001                     | 80                              | 20                                                      | 175                            |
| STTH1R06     | DO-35, SMA, SMB                                                            | 1                | 600                                           | 1                                   | 1.7                       | 1                                       | 0.001                     | 25                              | 20                                                      | 175                            |
| STTH2L06     | DO-35, SMA, SMB                                                            | 1                | 600                                           | 2                                   | 1.3                       | 2                                       | 0.002                     | 85                              | 35                                                      | 175                            |
| STTH2R06     | DO-35, SMA, SMB, SMC                                                       | 1                | 600                                           | 2                                   | 1.7                       | 2                                       | 0.002                     | 30                              | 30                                                      | 175                            |
| STTH3L06     | DO-201AD, SMB, SMC                                                         | 1                | 600                                           | 3                                   | 1.3                       | 3                                       | 0.003                     | 85                              | 40                                                      | 175                            |
| STTH3R06     | DO-201AD, SMB, SMC                                                         | 1                | 600                                           | 3                                   | 1.7                       | 3                                       | 0.003                     | 30                              | 45                                                      | 175                            |
| STTH4L06     | DO-201AD                                                                   | 1                | 600                                           | 4                                   | 1.3                       | 3                                       | 0.003                     | 55                              | 80                                                      | 175                            |
| STTH4R06DEE  | PowerFLAT™ 3.3 x 3.3                                                       | 1                | 600                                           | 4                                   | 1.7                       | 4                                       | 0.003                     | 50                              | 60                                                      | 150                            |
| STTH506      | DPAK                                                                       | 1                | 600                                           | 5                                   | 1.85                      | 5                                       | 0.005                     | 30                              | 55                                                      | 175                            |
| STTH506D     | TO-220AC Ins                                                               | 1                | 600                                           | 5                                   | 3.6                       | 5                                       | 0.006                     | 25                              | 60                                                      | 150                            |
| STTH5L06     | TO-220AC, DO-201AD, DPAK, TO-220FPAC                                       | 1                | 600                                           | 5                                   | 1.3                       | 5                                       | 0.005                     | 95                              | 60                                                      | 175                            |
| STTH5R06     | D <sup>2</sup> PAK, TO-220AC, DPAK, TO-220FPAC                             | 1                | 600                                           | 5                                   | 2.9                       | 5                                       | 0.02                      | 25                              | 50                                                      | 175                            |
| STTH5R06DJF  | PowerFLAT™ 5 x 6                                                           | 1                | 600                                           | 5                                   | 1.2                       | 5                                       | 0.06                      | 40                              | 190                                                     | 175                            |
| STTH806      | D <sup>2</sup> PAK, TO-220AC Ins                                           | 1                | 600                                           | 8                                   | 1.85                      | 8                                       | 0.008                     | 35                              | 90                                                      | 175                            |
| STTH8L06     | D <sup>2</sup> PAK, TO-220AC, TO-220FPAC                                   | 1                | 600                                           | 8                                   | 1.3                       | 8                                       | 0.008                     | 105                             | 120                                                     | 175                            |
| STTH8R06     | D <sup>2</sup> PAK, TO-220AC, TO-220AC Ins, I <sup>2</sup> PAK, TO-220FPAC | 1                | 600                                           | 8                                   | 2.9                       | 8                                       | 0.025                     | 25                              | 80                                                      | 175                            |
| STTH8S06     | TO-220AC, TO-220FPAC                                                       | 1                | 600                                           | 8                                   | 3.4                       | 8                                       | 0.02                      | 18                              | 60                                                      | 175                            |
| STTH10LCD06  | TO-220FPAC                                                                 | 1                | 600                                           | 10                                  | 2                         | 10                                      | 0.005                     | 50                              | 80                                                      | 175                            |
| STTH10LCD06C | D <sup>2</sup> PAK, TO-220AB, TO-220FPAC                                   | 2                | 600                                           | 2 x 5                               | 2                         | 5                                       | 0.001                     | 25                              | 45                                                      | 175                            |
| STTH12R06    | D <sup>2</sup> PAK, TO-220AC, TO-220AC Ins, TO-220FPAC                     | 1                | 600                                           | 12                                  | 2.9                       | 12                                      | 0.045                     | 25                              | 100                                                     | 175                            |
| STTH12S06    | TO-220FPAC                                                                 | 1                | 600                                           | 12                                  | 3.4                       | 12                                      | 0.03                      | 21                              | 100                                                     | 175                            |
| STTH15L06    | D <sup>2</sup> PAK, TO-220AC, TO-220FPAC                                   | 1                | 600                                           | 15                                  | 1.55                      | 15                                      | 0.015                     | 55                              | 130                                                     | 175                            |
| STTH15R06    | TO-220AC, TO-220FPAC                                                       | 1                | 600                                           | 15                                  | 2.9                       | 15                                      | 0.06                      | 30                              | 120                                                     | 175                            |
| STTH16L06C   | D <sup>2</sup> PAK, TO-220AB, TO-220FPAC                                   | 2                | 600                                           | 2 x 8                               | 1.8                       | 8                                       | 0.008                     | 35                              | 90                                                      | 175                            |

## ULTRAFast RECTIFIERS 600 V

| Part number   | Package                                  | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_F$ ) spec | Reverse current ( $I_R$ ) | Reverse recovery time ( $t_n$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_J$ ) |
|---------------|------------------------------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|-----------------------------------------|---------------------------|---------------------------------|---------------------------------------------------------|--------------------------------|
|               |                                          |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                     | max (mA)                  | max (ns)                        | max (A)                                                 | max (°C)                       |
| STTH20LCD06C  | D <sup>2</sup> PAK, TO-220AB, TO-220FPAC | 2                | 600                                           | 2 x 10                              | 2                         | 10                                      | 0.001                     | 50                              | 80                                                      | 175                            |
| STTH3006      | DO-247, DOP3 Ins                         | 1                | 600                                           | 30                                  | 1.85                      | 30                                      | 0.025                     | 50                              | 160                                                     | 175                            |
| STTH3006D     | DOP3 Ins                                 | 1                | 600                                           | 30                                  | 3.6                       | 30                                      | 0.04                      | 45                              | 180                                                     | 150                            |
| STTH30L06     | D <sup>2</sup> PAK, DO-247               | 1                | 600                                           | 30                                  | 1.55                      | 30                                      | 0.025                     | 65                              | 160                                                     | 175                            |
| STTH30L06C    | D <sup>2</sup> PAK, TO-247               | 2                | 600                                           | 2 x 15                              | 1.55                      | 15                                      | 0.015                     | 55                              | 130                                                     | 175                            |
| STTH30R06     | DO-247, DOP3 Ins                         | 1                | 600                                           | 30                                  | 1.85                      | 30                                      | 0.025                     | 50                              | 160                                                     | 175                            |
| STTH30R06C    | TO-247                                   | 2                | 600                                           | 2 x 15                              | 2.9                       | 15                                      | 0.06                      | 30                              | 120                                                     | 175                            |
| STTH30S06     | DO-247                                   | 1                | 600                                           | 30                                  | 3.6                       | 30                                      | 0.05                      | 50                              | 180                                                     | 175                            |
| STTH50W06S    | TO-247                                   | 1                | 600                                           | 50                                  | 1.75                      | 50                                      | 0.05                      | 45                              | 300                                                     | 175                            |
| STTH6006TV    | ISOTOP                                   | 2                | 600                                           | 2 x 30                              | 1.85                      | 30                                      | 0.025                     | 50                              | 210                                                     | 150                            |
| STTH6006W     | DO-247                                   | 1                | 600                                           | 60                                  | 1.85                      | 60                                      | 0.05                      | 60                              | 400                                                     | 175                            |
| STTH60L06     | DO-247                                   | 1                | 600                                           | 60                                  | 1.55                      | 60                                      | 0.05                      | 70                              | 400                                                     | 175                            |
| STTH60L06C    | TO-247                                   | 2                | 600                                           | 2 x 30                              | 1.55                      | 30                                      | 0.025                     | 65                              | 210                                                     | 175                            |
| STTH60L06TV   | ISOTOP                                   | 2                | 600                                           | 2 x 30                              | 1.55                      | 60                                      | 0.025                     | 65                              | 210                                                     | 150                            |
| STTH8006      | DO-247                                   | 1                | 600                                           | 80                                  | 1.6                       | 80                                      | 0.05                      | 70                              | 500                                                     | 150                            |
| STTH120L06TV  | ISOTOP                                   | 2                | 600                                           | 2 x 60                              | 1.55                      | 60                                      | 0.05                      | 70                              | 500                                                     | 150                            |
| STTH200L06TV  | ISOTOP                                   | 2                | 600                                           | 2 x 100                             | 1.55                      | 100                                     | 0.08                      | 80                              | 800                                                     | 150                            |
| STTH200W06TV1 | ISOTOP                                   | 2                | 600                                           | 2 x 100                             | 1.3                       | 100                                     | 0.03                      | 75                              | 800                                                     | 150                            |

## HYPERFAST TANDEM RECTIFIERS 600 V

| Generic part number    | Package      | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_o$ ) | Forward voltage ( $V_f$ ) | $V_f$ measure condition (@ $I_F$ spec) | Reverse current ( $I_R$ ) | Reverse recovery charge ( $Q_{rr}$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_j$ ) |
|------------------------|--------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|----------------------------------------|---------------------------|--------------------------------------|---------------------------------------------------------|--------------------------------|
|                        |              |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                    | max (mA)                  | max (nC)                             | max (A)                                                 | max (°C)                       |
| <b>STTH806DTI</b>      | TO-220AC Ins | 1                | 600                                           | 8                                   | 3.6                       | 8                                      | 0.01                      | 30                                   | 180                                                     | 150                            |
| <b>STTH806TTI</b>      | TO-220AB Ins | 1                | 600                                           | 8                                   | 3.6                       | 8                                      | 0.01                      | 30                                   | 180                                                     | 150                            |
| <b>STTH8ST06DI</b>     | TO-220AC Ins | 1                | 600                                           | 8                                   | 3.1                       | 8                                      | 0.006                     | 26                                   | 55                                                      | 175                            |
| <b>STTH8T06DI</b>      | TO-220AC Ins | 1                | 600                                           | 8                                   | 2.95                      | 8                                      | 0.01                      | 30                                   | 80                                                      | 175                            |
| <b>STTH12T06DI (*)</b> | TO-220AC Ins | 1                | 600                                           | 12                                  | TBD                       | 12                                     | TBD                       | TBD                                  | TBD                                                     | 175                            |
| <b>STTH1506DPI</b>     | DOP3 Ins     | 1                | 600                                           | 15                                  | 3.6                       | 15                                     | 0.02                      | 35                                   | 130                                                     | 150                            |
| <b>STTH1506TPI</b>     | TOP3 Ins     | 1                | 600                                           | 15                                  | 3.6                       | 15                                     | 0.02                      | 35                                   | 130                                                     | 150                            |

Notes :

(\*) Available in Q2-2013. The related parameters are target ones.

# ULTRAFAST RECTIFIERS 800 V, 1000 V AND 1200 V

| Part number | Package                                                | Number of diodes | Repetitive peak reverse voltage (V <sub>RRM</sub> ) | Average rectified current (I <sub>A</sub> ) | Forward voltage (V <sub>F</sub> ) | V <sub>F</sub> measure condition (@ I <sub>F</sub> ) | Reverse current (I <sub>R</sub> ) | Reverse recovery time (t <sub>r</sub> ) | Non-repetitive peak forward surge current (I <sub>FSM</sub> ) | Junction temperature (T <sub>J</sub> ) |
|-------------|--------------------------------------------------------|------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------|------------------------------------------------------|-----------------------------------|-----------------------------------------|---------------------------------------------------------------|----------------------------------------|
|             |                                                        |                  | max (V)                                             | max (A)                                     | max (V)                           | (A)                                                  | max (mA)                          | max (ns)                                | max (A)                                                       | max (°C)                               |
| 800 V       |                                                        |                  |                                                     |                                             |                                   |                                                      |                                   |                                         |                                                               |                                        |
| STTH108     | DO-35, SMA                                             | 1                | 800                                                 | 1                                           | 1.65                              | 1                                                    | 0.005                             | 75                                      | 20                                                            | 175                                    |
| STTH208     | DO-15, SMB                                             | 1                | 800                                                 | 2                                           | 1.65                              | 2                                                    | 0.005                             | 75                                      | 35                                                            | 175                                    |
| STTH1008DTI | TO-220AC AC ISOL.                                      | 1                | 800                                                 | 10                                          | 2.5                               | 10                                                   | 0.02                              | 55                                      | 120                                                           | 150                                    |
| 1000 V      |                                                        |                  |                                                     |                                             |                                   |                                                      |                                   |                                         |                                                               |                                        |
| STTH110     | DO-35, SMA                                             | 1                | 1000                                                | 1                                           | 1.7                               | 1                                                    | 0.01                              | 75                                      | 18                                                            | 175                                    |
| STTH310     | DO-201AD bent, DO-201AD, SMC                           | 1                | 1000                                                | 3                                           | 1.7                               | 3                                                    | 0.01                              | 75                                      | 45                                                            | 175                                    |
| STTH810     | D <sup>2</sup> PAK, TO-220AC, TO-220AC Ins, TO-220FPAC | 1                | 1000                                                | 8                                           | 2                                 | 8                                                    | 0.005                             | 65                                      | 60                                                            | 175                                    |
| STTH1210    | TO-220AC, TO-220AC Ins                                 | 1                | 1000                                                | 12                                          | 2                                 | 12                                                   | 0.01                              | 65                                      | 80                                                            | 175                                    |
| STTH3010    | TO-220AC, DO-247, DOP3 Ins                             | 1                | 1000                                                | 30                                          | 2                                 | 30                                                   | 0.015                             | 70                                      | 180                                                           | 175                                    |
| STTH6010    | DO-247                                                 | 1                | 1000                                                | 60                                          | 2                                 | 60                                                   | 0.025                             | 80                                      | 400                                                           | 175                                    |
| STTH6110TV  | ISOTOP                                                 | 2                | 1000                                                | 2 x 30                                      | 2                                 | 30                                                   | 0.015                             | 70                                      | 240                                                           | 150                                    |
| STTH12010TV | ISOTOP                                                 | 2                | 1000                                                | 2 x 60                                      | 2                                 | 60                                                   | 0.02                              | 80                                      | 400                                                           | 150                                    |
| STTH12012TV | ISOTOP                                                 | 2                | 1000                                                | 2 x 60                                      | 2                                 | 60                                                   | 0.02                              | 80                                      | 400                                                           | 150                                    |
| 1200 V      |                                                        |                  |                                                     |                                             |                                   |                                                      |                                   |                                         |                                                               |                                        |
| STTH112     | DO-35, SMA, SMB                                        | 1                | 1200                                                | 1                                           | 1.9                               | 1                                                    | 0.005                             | 75                                      | 18                                                            | 175                                    |
| STTH212     | SMB, SMC                                               | 1                | 1200                                                | 2                                           | 1.75                              | 2                                                    | 0.01                              | 75                                      | 40                                                            | 175                                    |
| STTH312     | DPAK                                                   | 1                | 1200                                                | 3                                           | 2                                 | 3                                                    | 0.01                              | 80                                      | 35                                                            | 175                                    |
| STTH512     | TO-220AC, DPAK, TO-220FPAC                             | 1                | 1200                                                | 5                                           | 2.2                               | 5                                                    | 0.005                             | 70                                      | 55                                                            | 175                                    |
| STTH812     | D <sup>2</sup> PAK, TO-220AC, TO-220AC Ins, TO-220FPAC | 1                | 1200                                                | 8                                           | 2.2                               | 8                                                    | 0.008                             | 70                                      | 80                                                            | 175                                    |
| STTH1212    | D <sup>2</sup> PAK, TO-220AC                           | 1                | 1200                                                | 12                                          | 2.2                               | 12                                                   | 0.01                              | 70                                      | 100                                                           | 175                                    |
| STTH1512    | D <sup>2</sup> PAK, DO-247, DOP3 Ins                   | 1                | 1200                                                | 15                                          | 2.1                               | 15                                                   | 0.015                             | 75                                      | 200                                                           | 175                                    |
| STTH3012    | TO-220AC, DO-247                                       | 1                | 1200                                                | 30                                          | 2.25                              | 30                                                   | 0.02                              | 80                                      | 210                                                           | 175                                    |
| STTH6012    | DO-247                                                 | 1                | 1200                                                | 60                                          | 2.25                              | 60                                                   | 0.03                              | 85                                      | 400                                                           | 175                                    |
| STTH6112TV  | ISOTOP                                                 | 2                | 1200                                                | 2 x 30                                      | 2.1                               | 30                                                   | 0.02                              | 45                                      | 250                                                           | 150                                    |
| STTH9012TV  | ISOTOP                                                 | 2                | 1200                                                | 2 x 45                                      | 2.1                               | 45                                                   | 0.03                              | 85                                      | 420                                                           | 150                                    |

## AUTOMOTIVE-GRADE SCHOTTKY DIODES

| Part number  | Package            | Number of diodes | Repetitive peak reverse voltage (V <sub>RRM</sub> ) | Average rectified current (I <sub>a</sub> ) | Forward voltage (V <sub>F</sub> ) | V <sub>F</sub> measure condition (@ I <sub>F</sub> ) | Reverse current (I <sub>R</sub> ) | Non-repetitive peak forward surge current (I <sub>FSM</sub> ) | Junction temperature (T <sub>J</sub> ) |
|--------------|--------------------|------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------|------------------------------------------------------|-----------------------------------|---------------------------------------------------------------|----------------------------------------|
|              |                    |                  | max (V)                                             | max (A)                                     | max (V)                           | (A)                                                  | max (mA)                          | max (A)                                                       | max (°C)                               |
| 30 V         |                    |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| STPS8L30-Y   | DBAK               | 1                | 30                                                  | 8                                           | 0.4                               | 0.4                                                  | 1                                 | 75                                                            | 150                                    |
| STPS60L30C-Y | PowerSO-20         | 2                | 30                                                  | 2 x 30                                      | 0.49                              | 30                                                   | 2                                 | 250                                                           | 150                                    |
| 40 V         |                    |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| BAT54-Y      | SOT-23, SOT-323    | 1, 2             | 40                                                  | 0.3                                         | 0.9                               | 0.1                                                  | 0.001                             | 1                                                             | 150                                    |
| STPS140-Y    | SMA, SMB           | 1                | 40                                                  | 1                                           | 0.55                              | 1                                                    | 0.012                             | 60                                                            | 150                                    |
| STPS140Z-Y   | SOD-123            | 1                | 40                                                  | 1                                           | 0.55                              | 1                                                    | 0.012                             | 5.5                                                           | 150                                    |
| STPS1L40-Y   | SMA, SMB           | 1                | 40                                                  | 1                                           | 0.42                              | 1                                                    | 0.035                             | 60                                                            | 150                                    |
| STPS340-Y    | SMB, SMC           | 1                | 40                                                  | 3                                           | 0.63                              | 3                                                    | 0.02                              | 75                                                            | 150                                    |
| STPS3L40-Y   | SMC                | 1                | 40                                                  | 3                                           | 0.5                               | 3                                                    | 0.1                               | 75                                                            | 150                                    |
| 45 V         |                    |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| STPS1045B-Y  | DBAK               | 1                | 45                                                  | 10                                          | 0.63                              | 10                                                   | 0.1                               | 75                                                            | 175                                    |
| STPS1545-Y   | TO-220AC           | 1                | 45                                                  | 15                                          | 0.57                              | 15                                                   | 0.2                               | 220                                                           | 175                                    |
| STPS1545C-Y  | D <sup>2</sup> PAK | 2                | 45                                                  | 2 x 7.5                                     | 0.84                              | 15                                                   | 0.1                               | 150                                                           | 175                                    |
| STPS15L45C-Y | DBAK               | 2                | 45                                                  | 2 X 7.5                                     | 0.64                              | 15                                                   | 1                                 | 75                                                            | 150                                    |
| STPS2045C-Y  | D <sup>2</sup> PAK | 2                | 45                                                  | 2 x 10                                      | 0.84                              | 20                                                   | 0.1                               | 180                                                           | 175                                    |
| STPS2545C-Y  | D <sup>2</sup> PAK | 2                | 45                                                  | 2 x 12.5                                    | 0.84                              | 25                                                   | 0.125                             | 200                                                           | 175                                    |
| STPS2545CT-Y | TO-220AB           | 2                | 45                                                  | 2 x 12.5                                    | 0.84                              | 25                                                   | 0.125                             | 200                                                           | 175                                    |
| STPS3045C-Y  | D <sup>2</sup> PAK | 2                | 45                                                  | 2 x 15                                      | 0.84                              | 30                                                   | 0.2                               | 220                                                           | 175                                    |
| STPS4045C-Y  | TO-247             | 2                | 45                                                  | 2 x 20                                      | 0.76                              | 20                                                   | 0.2                               | 220                                                           | 175                                    |
| STPS40L45C-Y | D <sup>2</sup> PAK | 2                | 45                                                  | 2 x 20                                      | 0.49                              | 20                                                   | 0.6                               | 230                                                           | 150                                    |
| STPS6045C-Y  | TO-247             | 2                | 45                                                  | 2 X 30                                      | 0.63                              | 30                                                   | 0.5                               | 400                                                           | 175                                    |
| 60 V         |                    |                  |                                                     |                                             |                                   |                                                      |                                   |                                                               |                                        |
| STPS160-Y    | SMA, SMB           | 1                | 60                                                  | 1                                           | 0.57                              | 1                                                    | 4                                 | 75                                                            | 150                                    |
| STPS2L60-Y   | SMA                | 1                | 60                                                  | 2                                           | 0.6                               | 2                                                    | 0.1                               | 75                                                            | 150                                    |
| STPS3L60-Y   | SMC                | 1                | 60                                                  | 3                                           | 0.65                              | 3                                                    | 0.055                             | 75                                                            | 150                                    |
| STPS3L60U-Y  | SMB                | 1                | 60                                                  | 3                                           | 0.62                              | 3                                                    | 0.15                              | 100                                                           | 150                                    |
| STPS5L60-Y   | SMC                | 1                | 60                                                  | 5                                           | 0.48                              | 5                                                    | 0.22                              | 150                                                           | 150                                    |

## AUTOMOTIVE-GRADE SCHOTTKY DIODES

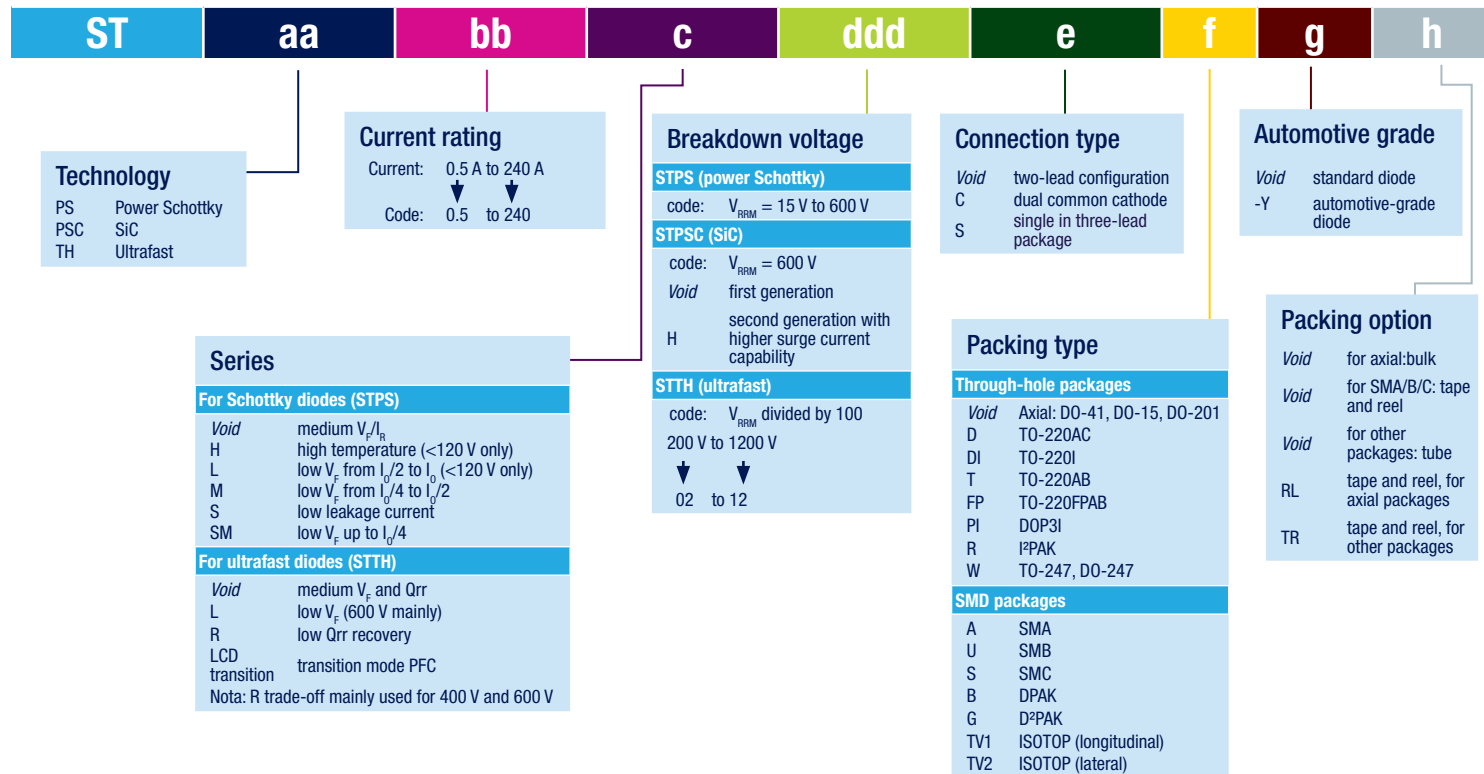
| Part number    | Package            | Number of diodes | Repetitive peak reverse voltage ( $V_{RRM}$ ) | Average rectified current ( $I_A$ ) | Forward voltage ( $V_F$ ) | $V_F$ measure condition (@ $I_F$ ) | Reverse current ( $I_R$ ) | Non-repetitive peak forward surge current ( $I_{FSM}$ ) | Junction temperature ( $T_J$ ) |
|----------------|--------------------|------------------|-----------------------------------------------|-------------------------------------|---------------------------|------------------------------------|---------------------------|---------------------------------------------------------|--------------------------------|
|                |                    |                  | max (V)                                       | max (A)                             | max (V)                   | (A)                                | max (mA)                  | max (A)                                                 | max (°C)                       |
| STPS20L60C-Y   | D <sup>2</sup> PAK | 2                | 60                                            | 2 x 10                              | 0.6                       | 10                                 | 0.35                      | 220                                                     | 150                            |
| STPS30H60-Y    | D <sup>2</sup> PAK | 2                | 60                                            | 2 x 15                              | 0.57                      | 15                                 | 0.06                      | 230                                                     | 175                            |
| STPS30H60C-Y   | PowerSO-20         | 2                | 60                                            | 2 x 15                              | 0.58                      | 15                                 | 0.15                      | 250                                                     | 150                            |
| 100 V          |                    |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS1H100-Y    | SMA, SMB           | 1                | 100                                           | 1                                   | 0.77                      | 1                                  | 0.004                     | 50                                                      | 175                            |
| STPS2H100-Y    | SMA, SMB           | 1                | 100                                           | 2                                   | 0.79                      | 2                                  | 0.001                     | 75                                                      | 175                            |
| STPS5H100-Y    | DPAK               | 1                | 100                                           | 5                                   | 0.79                      | 5                                  | 0.004                     | 75                                                      | 175                            |
| STPS15H100C-Y  | DPAK               | 2                | 100                                           | 2 x 7.5                             | 0.8                       | 7.5                                | 0.003                     | 75                                                      | 175                            |
| STPS41H100C-Y  | D2PAK              | 2                | 100                                           | 2 x 20                              | 0.8                       | 20                                 | 0.01                      | 220                                                     | 175                            |
| 150 V          |                    |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS1150-Y     | SMA                | 1                | 150                                           | 1                                   | 0.67                      | 1                                  | 0.001                     | 50                                                      | 175                            |
| STPS3150-Y     | SMB                | 1                | 150                                           | 3                                   | 0.82                      | 3                                  | 0.002                     | 80                                                      | 175                            |
| 170 V          |                    |                  |                                               |                                     |                           |                                    |                           |                                                         |                                |
| STPS40170C-Y   | D2PAK              | 2                | 170                                           | 2 x 20                              | 0.92                      | 20                                 | 0.03                      | 250                                                     | 175                            |
| STPS200170TV1Y | ISOTOP             | 2                | 170                                           | 200                                 | 0.85                      | 100                                | 0.2                       | 700                                                     | 150                            |

## AUTOMOTIVE-GRADE ULTRAFAST DIODES

| Part number     | Package                    | Number of diodes | Repetitive peak reverse voltage (V <sub>RRM</sub> ) | Average rectified current (I <sub>O</sub> ) | Forward voltage (V <sub>F</sub> ) | V <sub>F</sub> measure condition (@ I <sub>F</sub> ) | Reverse current (I <sub>R</sub> ) | Reverse recovery time (t <sub>r</sub> ) | Non-repetitive peak forward surge current (I <sub>FSM</sub> ) | Junction temperature (T <sub>J</sub> ) |
|-----------------|----------------------------|------------------|-----------------------------------------------------|---------------------------------------------|-----------------------------------|------------------------------------------------------|-----------------------------------|-----------------------------------------|---------------------------------------------------------------|----------------------------------------|
|                 |                            |                  | max (V)                                             | max (A)                                     | max (V)                           | (A)                                                  | max (mA)                          | max (ns)                                | max (A)                                                       | max (°C)                               |
| 200 V and 300 V |                            |                  |                                                     |                                             |                                   |                                                      |                                   |                                         |                                                               |                                        |
| STTH102-Y       | SMA                        | 1                | 200                                                 | 1                                           | 0.97                              | 1                                                    | 0.001                             | 20                                      | 40                                                            | 175                                    |
| STTH2R02-Y      | SMB                        | 1                | 200                                                 | 2                                           | 1                                 | 2                                                    | 0.003                             | 20                                      | 75                                                            | 175                                    |
| STTH4R02-Y      | SMB, SMC                   | 1                | 200                                                 | 4                                           | 1.05                              | 4                                                    | 0.003                             | 20                                      | 70                                                            | 175                                    |
| STTH602C-Y      | DPAK                       | 2                | 200                                                 | 2 X 3                                       | 0.95                              | 3                                                    | 0.003                             | 20                                      | 60                                                            | 175                                    |
| STTH802-Y       | DPAK                       | 1                | 200                                                 | 8                                           | 1.05                              | 8                                                    | 0.006                             | 30                                      | 100                                                           | 175                                    |
| STTH1002C-Y     | D <sup>2</sup> PAK, DPAK   | 2                | 200                                                 | 2 x 5                                       | 1.1                               | 5                                                    | 0.005                             | 20                                      | 50                                                            | 175                                    |
| STTH1003S-Y     | DPAK                       | 1                | 300                                                 | 10                                          | 1.3                               | 10                                                   | 0.1                               | 35                                      | 100                                                           | 175                                    |
| STTH2003C-Y     | D <sup>2</sup> PAK         | 2                | 300                                                 | 2 x 10                                      | 1.25                              | 10                                                   | 0.02                              | 40                                      | 110                                                           | 175                                    |
| 600 V           |                            |                  |                                                     |                                             |                                   |                                                      |                                   |                                         |                                                               |                                        |
| STTH5R06B-Y     | DPAK                       | 1                | 600                                                 | 5                                           | 3.2                               | 5                                                    | 0.03                              | 35                                      | 50                                                            | 175                                    |
| STTH5R06G-Y     | D <sup>2</sup> PAK         | 1                | 600                                                 | 5                                           | 3.2                               | 5                                                    | 0.03                              | 35                                      | 70                                                            | 175                                    |
| STTH8R06-Y      | D <sup>2</sup> PAK         | 1                | 600                                                 | 8                                           | 3.2                               | 8                                                    | 0.03                              | 45                                      | 90                                                            | 175                                    |
| STTH30L06-Y     | D <sup>2</sup> PAK, DO-247 | 1                | 600                                                 | 30                                          | 1.55                              | 30                                                   | 0.025                             | 65                                      | 300                                                           | 175                                    |
| 1000 V          |                            |                  |                                                     |                                             |                                   |                                                      |                                   |                                         |                                                               |                                        |
| STTH810-Y       | D <sup>2</sup> PAK         | 1                | 1000                                                | 8                                           | 2                                 | 8                                                    | 0.005                             | 85                                      | 60                                                            | 175                                    |
| STTH1210-Y      | TO-220AC                   | 1                | 1000                                                | 12                                          | 2                                 | 12                                                   | 0.01                              | 90                                      | 80                                                            | 175                                    |
| STTH3010-Y      | D <sup>2</sup> PAK, DO-247 | 1                | 1000                                                | 30                                          | 2                                 | 30                                                   | 0.015                             | 100                                     | 300                                                           | 175                                    |
| STTH6010-Y      | DO-247                     | 1                | 1000                                                | 60                                          | 1.7                               | 60                                                   | 0.02                              | 65                                      | 400                                                           | 175                                    |
| 1200 V          |                            |                  |                                                     |                                             |                                   |                                                      |                                   |                                         |                                                               |                                        |
| STTH1512-Y      | D <sup>2</sup> PAK         | 1                | 1200                                                | 15                                          | 2.1                               | 15                                                   | 0.015                             | 75                                      | 200                                                           | 175                                    |



# Ordering information



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