

### Snap-in Type

Series: U Type : TS

# Discontinued



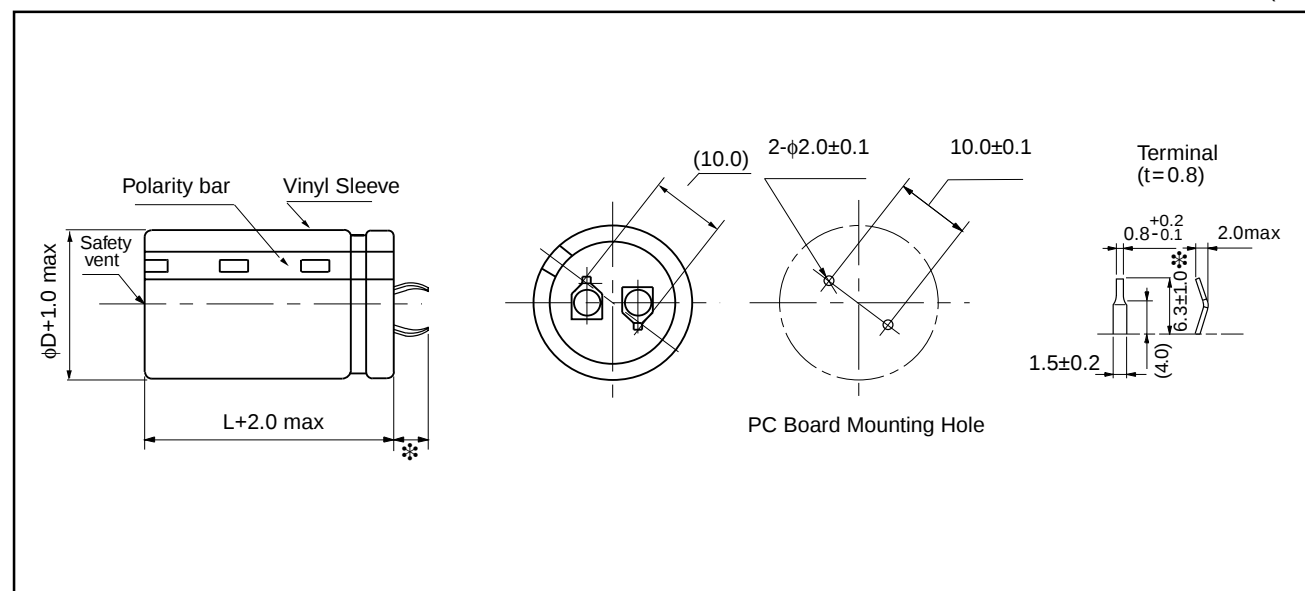
■ Features Endurance :85°C 2000 h

### ■ Specifications

|                                                |                                                                                                                                                                                                                                                                                   |             |      |                                       |      |                                                                   |          |        |      |            |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------|---------------------------------------|------|-------------------------------------------------------------------|----------|--------|------|------------|
| Operating temp. range                          | -40 to +85°C                                                                                                                                                                                                                                                                      |             |      |                                       |      | -25 to +85°C                                                      |          |        |      |            |
| Rated W.V. range                               | 16 to 250 V .DC                                                                                                                                                                                                                                                                   |             |      |                                       |      | 315 to 450 V .DC                                                  |          |        |      |            |
| Nominal cap. range                             | 120 to 33000 μ F                                                                                                                                                                                                                                                                  |             |      |                                       |      | 33 to 330 μ F                                                     |          |        |      |            |
| Capacitance tol.                               | ±20 % (120Hz/+20°C)                                                                                                                                                                                                                                                               |             |      |                                       |      |                                                                   |          |        |      |            |
| DC leakage current                             | 0.01CV(μA)(after 5min.) max.<br>CxV ≤ 100000μFxV(≤100V.DC)<br>3√CV (μA)(after 5min.) max.<br>CxV > 100000μFxV(≤100V.DC)<br>160 ~ 250V.DC                                                                                                                                          |             |      |                                       |      | 3√CV (μA)(after 5min) max.<br>C : Capacitance (μF), V : W.V(V.DC) |          |        |      |            |
| tan δ (120Hz / +20°C)                          | W.V.(V)                                                                                                                                                                                                                                                                           |             | 16   | 25                                    | 35   | 50, 63                                                            | 80 ~ 450 | (max.) |      |            |
|                                                | tan δ                                                                                                                                                                                                                                                                             |             | 0.35 | 0.30                                  | 0.25 | 0.20                                                              | 0.15     |        |      |            |
| Frequency Correction Factor for ripple current | Frequency (Hz)                                                                                                                                                                                                                                                                    |             |      | 50                                    | 60   | 100                                                               | 120      | 500    | 1k   | 10k to 50k |
|                                                | C.F.                                                                                                                                                                                                                                                                              | 16 to 100V  | 0.93 | 0.95                                  | 0.99 | 1.00                                                              | 1.05     | 1.08   | 1.15 |            |
|                                                |                                                                                                                                                                                                                                                                                   | 160 to 450V | 0.75 | 0.80                                  | 0.95 | 1.00                                                              | 1.20     | 1.25   | 1.40 |            |
| Load life                                      | After 2000hrs. application of DC rated working voltage with full rated ripple current at +85°C, the capacitor shall meet the following limits.                                                                                                                                    |             |      |                                       |      |                                                                   |          |        |      |            |
|                                                | Capacitance change                                                                                                                                                                                                                                                                |             |      | ≤ ±20% of the initial measured value  |      |                                                                   |          |        |      |            |
|                                                | tan δ                                                                                                                                                                                                                                                                             |             |      | ≤ 150% of the initial specified value |      |                                                                   |          |        |      |            |
|                                                | DC leakage current                                                                                                                                                                                                                                                                |             |      | ≤ the initial specified value         |      |                                                                   |          |        |      |            |
| Shelf life                                     | After storage for 1000hrs. at +85°C with no voltage application, the capacitor shall meet the limits for load life.                                                                                                                                                               |             |      |                                       |      |                                                                   |          |        |      |            |
| Anti-solvent                                   | Parts with rated voltage of 16 to 100V can withstand capacitor dipping (ultrasonic) and steam cleaning of printed circuit boards with Freon TE, Freon TES, Freon TP-35, or the equivalent if the cleanser temperature is 40°C or lower and the cleaning time is within 5 minutes. |             |      |                                       |      |                                                                   |          |        |      |            |

### ■ Dimensions

(mm)



■ Standard Products

| W.V.<br>(V) | Cap.<br>( $\pm 20\%$ )<br>( $\mu\text{F}$ ) | Case size    |                | Specification                               |                                     | Part No.    |
|-------------|---------------------------------------------|--------------|----------------|---------------------------------------------|-------------------------------------|-------------|
|             |                                             | Dia.<br>(mm) | Length<br>(mm) | Ripple current<br>(120Hz)<br>(+85°C)<br>(A) | $\tan \delta$<br>(120Hz)<br>(+20°C) |             |
| 16          | 4700                                        | 22           | 25             | 1.60                                        | 0.35                                | ECES1CU472D |
|             | 6800                                        | 22           | 31.5           | 1.80                                        | 0.35                                | ECES1CU682E |
|             |                                             | 25           | 25             | 1.80                                        | 0.35                                | ECES1CU682J |
|             | 10000                                       | 22           | 40             | 2.40                                        | 0.35                                | ECES1CU103G |
|             |                                             | 25           | 31.5           | 2.40                                        | 0.35                                | ECES1CU103K |
|             |                                             | 30           | 25             | 2.40                                        | 0.35                                | ECES1CU103Q |
|             | 15000                                       | 22           | 50             | 3.20                                        | 0.35                                | ECES1CU153H |
|             |                                             | 25           | 40             | 3.20                                        | 0.35                                | ECES1CU153M |
|             |                                             | 30           | 31.5           | 3.20                                        | 0.35                                | ECES1CU153R |
|             | 22000                                       | 25           | 50             | 3.60                                        | 0.35                                | ECES1CU223N |
|             |                                             | 30           | 40             | 3.60                                        | 0.35                                | ECES1CU223T |
|             |                                             | 35           | 31.5           | 3.60                                        | 0.35                                | ECES1CU223X |
|             | 33000                                       | 30           | 50             | 4.40                                        | 0.35                                | ECES1CU333U |
|             |                                             | 35           | 40             | 4.40                                        | 0.35                                | ECES1CU333Y |
| 25          | 3300                                        | 22           | 25             | 1.60                                        | 0.30                                | ECES1EU332D |
|             | 4700                                        | 22           | 31.5           | 1.80                                        | 0.30                                | ECES1EU472E |
|             |                                             | 25           | 25             | 1.80                                        | 0.30                                | ECES1EU472J |
|             | 6800                                        | 22           | 40             | 2.30                                        | 0.30                                | ECES1EU682G |
|             |                                             | 25           | 31.5           | 2.30                                        | 0.30                                | ECES1EU682K |
|             |                                             | 30           | 25             | 2.30                                        | 0.30                                | ECES1EU682Q |
|             | 10000                                       | 22           | 50             | 2.70                                        | 0.30                                | ECES1EU103H |
|             |                                             | 25           | 40             | 2.70                                        | 0.30                                | ECES1EU103M |
|             |                                             | 30           | 31.5           | 2.70                                        | 0.30                                | ECES1EU103R |
|             | 15000                                       | 25           | 50             | 3.40                                        | 0.30                                | ECES1EU153N |
|             |                                             | 30           | 40             | 3.40                                        | 0.30                                | ECES1EU153T |
|             |                                             | 35           | 31.5           | 3.40                                        | 0.30                                | ECES1EU153X |
|             | 22000                                       | 30           | 50             | 4.20                                        | 0.30                                | ECES1EU223U |
|             |                                             | 35           | 40             | 4.20                                        | 0.30                                | ECES1EU223Y |
| 35          | 2200                                        | 22           | 25             | 1.40                                        | 0.25                                | ECES1VU222D |
|             | 3300                                        | 22           | 31.5           | 1.70                                        | 0.25                                | ECES1VU332E |
|             |                                             | 25           | 25             | 1.70                                        | 0.25                                | ECES1VU332J |
|             | 4700                                        | 22           | 40             | 2.00                                        | 0.25                                | ECES1VU472G |
|             |                                             | 25           | 31.5           | 2.00                                        | 0.25                                | ECES1VU472K |
|             |                                             | 30           | 25             | 2.00                                        | 0.25                                | ECES1VU472Q |
|             | 6800                                        | 22           | 50             | 2.40                                        | 0.25                                | ECES1VU682H |
|             |                                             | 25           | 40             | 2.40                                        | 0.25                                | ECES1VU682M |
|             |                                             | 30           | 31.5           | 2.40                                        | 0.25                                | ECES1VU682R |
|             | 10000                                       | 25           | 50             | 3.00                                        | 0.25                                | ECES1VU103N |
|             |                                             | 30           | 40             | 3.00                                        | 0.25                                | ECES1VU103T |
|             |                                             | 35           | 31.5           | 3.00                                        | 0.25                                | ECES1VU103X |
|             | 15000                                       | 30           | 50             | 3.70                                        | 0.25                                | ECES1VU153U |
|             |                                             | 35           | 40             | 3.70                                        | 0.25                                | ECES1VU153Y |

Discontinued

■ Standard Products

| W.V.<br>(V) | Cap.<br>(±20%)<br>(μF) | Case size    |                | Specification                                  |                             | Part No.    |
|-------------|------------------------|--------------|----------------|------------------------------------------------|-----------------------------|-------------|
|             |                        | Dia.<br>(mm) | Length<br>(mm) | Ripple<br>current<br>(120Hz)<br>(+85°C)<br>(A) | tan.δ<br>(120Hz)<br>(+20°C) |             |
| 50          | 1500                   | 22           | 25             | 1.20                                           | 0.20                        | ECES1HU152D |
|             | 2200                   | 22           | 31.5           | 1.40                                           | 0.20                        | ECES1HU222E |
|             |                        | 25           | 25             | 1.40                                           | 0.20                        | ECES1HU222J |
|             | 3300                   | 22           | 40             | 1.70                                           | 0.20                        | ECES1HU332G |
|             |                        | 25           | 31.5           | 1.70                                           | 0.20                        | ECES1HU332K |
|             |                        | 30           | 25             | 1.70                                           | 0.20                        | ECES1HU332Q |
|             | 4700                   | 22           | 50             | 2.10                                           | 0.20                        | ECES1HU472H |
|             |                        | 25           | 40             | 2.10                                           | 0.20                        | ECES1HU472M |
|             |                        | 30           | 31.5           | 2.10                                           | 0.20                        | ECES1HU472R |
|             | 6800                   | 25           | 50             | 2.60                                           | 0.20                        | ECES1HU682N |
|             |                        | 30           | 40             | 2.60                                           | 0.20                        | ECES1HU682T |
|             |                        | 35           | 31.5           | 2.60                                           | 0.20                        | ECES1HU682X |
|             | 10000                  | 30           | 50             | 3.40                                           | 0.20                        | ECES1HU103U |
|             |                        | 35           | 40             | 3.40                                           | 0.20                        | ECES1HU103Y |
| 63          | 1000                   | 22           | 25             | 1.20                                           | 0.20                        | ECES1JU102D |
|             | 1500                   | 22           | 31.5           | 1.30                                           | 0.20                        | ECES1JU152E |
|             |                        | 25           | 25             | 1.30                                           | 0.20                        | ECES1JU152J |
|             | 2200                   | 22           | 40             | 1.50                                           | 0.20                        | ECES1JU222G |
|             |                        | 25           | 31.5           | 1.50                                           | 0.20                        | ECES1JU222K |
|             |                        | 30           | 25             | 1.50                                           | 0.20                        | ECES1JU222Q |
|             | 3300                   | 22           | 50             | 1.90                                           | 0.20                        | ECES1JU332H |
|             |                        | 25           | 40             | 1.90                                           | 0.20                        | ECES1JU332M |
|             |                        | 30           | 31.5           | 1.90                                           | 0.20                        | ECES1JU332R |
|             | 4700                   | 25           | 50             | 2.30                                           | 0.20                        | ECES1JU472N |
|             |                        | 30           | 40             | 2.30                                           | 0.20                        | ECES1JU472T |
|             |                        | 35           | 31.5           | 2.30                                           | 0.20                        | ECES1JU472X |
|             | 6800                   | 30           | 50             | 3.00                                           | 0.20                        | ECES1JU682U |
|             |                        | 35           | 40             | 3.00                                           | 0.20                        | ECES1JU682Y |
| 80          | 680                    | 22           | 25             | 1.00                                           | 0.15                        | ECES1JU681D |
|             | 1000                   | 22           | 31.5           | 1.20                                           | 0.15                        | ECES1JU102E |
|             |                        | 25           | 25             | 1.20                                           | 0.15                        | ECES1JU102J |
|             | 1500                   | 22           | 40             | 1.40                                           | 0.15                        | ECES1JU152G |
|             |                        | 25           | 31.5           | 1.40                                           | 0.15                        | ECES1JU152K |
|             |                        | 30           | 25             | 1.40                                           | 0.15                        | ECES1JU152Q |
|             | 2200                   | 22           | 50             | 1.70                                           | 0.15                        | ECES1JU222H |
|             |                        | 25           | 40             | 1.70                                           | 0.15                        | ECES1JU222M |
|             |                        | 30           | 31.5           | 1.70                                           | 0.15                        | ECES1JU222R |
|             | 3300                   | 25           | 50             | 2.10                                           | 0.15                        | ECES1JU332N |
|             |                        | 30           | 40             | 2.10                                           | 0.15                        | ECES1JU332T |
|             |                        | 35           | 31.5           | 2.10                                           | 0.15                        | ECES1JU332X |
|             | 4700                   | 30           | 50             | 2.60                                           | 0.15                        | ECES1JU472U |
|             |                        | 35           | 40             | 2.60                                           | 0.15                        | ECES1JU472Y |

Discontinued

■ Standard Products

| W.V.<br>(V) | Cap.<br>(±20%)<br>(μF) | Case size    |                | Specification                                  |                             | Part No.    |
|-------------|------------------------|--------------|----------------|------------------------------------------------|-----------------------------|-------------|
|             |                        | Dia.<br>(mm) | Length<br>(mm) | Ripple<br>current<br>(120Hz)<br>(+85°C)<br>(A) | tan.δ<br>(120Hz)<br>(+20°C) |             |
| 100         | 470                    | 22           | 25             | 1.00                                           | 0.15                        | ECES2AU471D |
|             | 680                    | 22           | 31.5           | 1.10                                           | 0.15                        | ECES2AU681E |
|             |                        | 25           | 25             | 1.10                                           | 0.15                        | ECES2AU681J |
|             | 1000                   | 22           | 40             | 1.20                                           | 0.15                        | ECES2AU102G |
|             |                        | 25           | 31.5           | 1.20                                           | 0.15                        | ECES2AU102K |
|             |                        | 30           | 25             | 1.20                                           | 0.15                        | ECES2AU102Q |
|             | 1500                   | 22           | 50             | 1.50                                           | 0.15                        | ECES2AU152H |
|             |                        | 25           | 40             | 1.50                                           | 0.15                        | ECES2AU152M |
|             |                        | 30           | 31.5           | 1.50                                           | 0.15                        | ECES2AU152R |
|             | 2200                   | 25           | 50             | 1.80                                           | 0.15                        | ECES2AU222N |
|             |                        | 30           | 40             | 1.80                                           | 0.15                        | ECES2AU222T |
|             |                        | 35           | 31.5           | 1.80                                           | 0.15                        | ECES2AU222X |
|             | 3300                   | 30           | 50             | 2.40                                           | 0.15                        | ECES2AU332U |
|             |                        | 35           | 40             | 2.40                                           | 0.15                        | ECES2AU332Y |
| 160         | 180                    | 22           | 25             | 0.65                                           | 0.15                        | ECES2CU181D |
|             | 270                    | 22           | 31.5           | 0.87                                           | 0.15                        | ECES2CU271E |
|             |                        | 25           | 25             | 0.87                                           | 0.15                        | ECES2CU271J |
|             | 390                    | 22           | 40             | 1.10                                           | 0.15                        | ECES2CU391G |
|             |                        | 25           | 31.5           | 1.10                                           | 0.15                        | ECES2CU391K |
|             |                        | 30           | 25             | 1.10                                           | 0.15                        | ECES2CU391Q |
|             | 560                    | 22           | 50             | 1.30                                           | 0.15                        | ECES2CU561H |
|             |                        | 25           | 40             | 1.30                                           | 0.15                        | ECES2CU561M |
|             |                        | 30           | 31.5           | 1.30                                           | 0.15                        | ECES2CU561R |
|             | 820                    | 25           | 50             | 1.50                                           | 0.15                        | ECES2CU821N |
|             |                        | 30           | 40             | 1.50                                           | 0.15                        | ECES2CU821T |
|             |                        | 35           | 31.5           | 1.50                                           | 0.15                        | ECES2CU821X |
|             | 1200                   | 30           | 50             | 1.80                                           | 0.15                        | ECES2CU122U |
|             |                        | 35           | 40             | 1.80                                           | 0.15                        | ECES2CU122Y |
| 200         | 150                    | 22           | 25             | 0.65                                           | 0.15                        | ECES2DU151D |
|             | 220                    | 22           | 31.5           | 0.87                                           | 0.15                        | ECES2DU221E |
|             |                        | 25           | 25             | 0.87                                           | 0.15                        | ECES2DU221J |
|             | 330                    | 22           | 35             | 1.10                                           | 0.15                        | ECES2DU331F |
|             |                        | 25           | 31.5           | 1.10                                           | 0.15                        | ECES2DU331K |
|             |                        | 30           | 25             | 1.10                                           | 0.15                        | ECES2DU331Q |
|             | 390                    | 22           | 40             | 1.20                                           | 0.15                        | ECES2DU391G |
|             |                        | 25           | 35             | 1.20                                           | 0.15                        | ECES2DU391L |
|             | 470                    | 22           | 50             | 1.30                                           | 0.15                        | ECES2DU471H |
|             |                        | 25           | 40             | 1.30                                           | 0.15                        | ECES2DU471M |
|             |                        | 30           | 31.5           | 1.30                                           | 0.15                        | ECES2DU471R |
|             |                        | 35           | 25             | 1.30                                           | 0.15                        | ECES2DU471W |
|             | 680                    | 25           | 50             | 1.50                                           | 0.15                        | ECES2DU681N |
|             |                        | 30           | 40             | 1.50                                           | 0.15                        | ECES2DU681T |
|             |                        | 35           | 31.5           | 1.50                                           | 0.15                        | ECES2DU681X |
|             | 820                    | 25           | 50             | 1.65                                           | 0.15                        | ECES2DU821N |
|             |                        | 35           | 35             | 1.65                                           | 0.15                        | ECES2DU821V |

Discontinued

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■ Standard Products

| W.V.<br>(V) | Cap.<br>(±20%)<br>(μF) | Case size    |                | Specification                                  |                             | Part No.    |
|-------------|------------------------|--------------|----------------|------------------------------------------------|-----------------------------|-------------|
|             |                        | Dia.<br>(mm) | Length<br>(mm) | Ripple<br>current<br>(120Hz)<br>(+85°C)<br>(A) | tan.δ<br>(120Hz)<br>(+20°C) |             |
| 200         | 1000                   | 30           | 50             | 1.80                                           | 0.15                        | ECES2DU102U |
|             |                        | 35           | 40             | 1.80                                           | 0.15                        | ECES2DU102Y |
| 250         | 120                    | 22           | 25             | 0.45                                           | 0.15                        | ECES2EU121D |
|             |                        | 22           | 31.5           | 0.65                                           | 0.15                        | ECES2EU151E |
|             | 150                    | 25           | 25             | 0.65                                           | 0.15                        | ECES2EU151J |
|             |                        | 22           | 31.5           | 0.71                                           | 0.15                        | ECES2EU181E |
|             | 220                    | 22           | 35             | 0.87                                           | 0.15                        | ECES2EU221F |
|             |                        | 25           | 31.5           | 0.87                                           | 0.15                        | ECES2EU221K |
|             |                        | 30           | 25             | 0.87                                           | 0.15                        | ECES2EU221Q |
|             | 270                    | 22           | 40             | 0.96                                           | 0.15                        | ECES2EU271G |
|             |                        | 25           | 35             | 0.96                                           | 0.15                        | ECES2EU271L |
|             |                        | 30           | 25             | 0.96                                           | 0.15                        | ECES2EU271Q |
|             | 330                    | 22           | 50             | 1.10                                           | 0.15                        | ECES2EU331H |
|             |                        | 25           | 40             | 1.10                                           | 0.15                        | ECES2EU331M |
|             |                        | 30           | 31.5           | 1.10                                           | 0.15                        | ECES2EU331R |
|             |                        | 35           | 25             | 1.10                                           | 0.15                        | ECES2EU331W |
|             | 390                    | 22           | 50             | 1.20                                           | 0.15                        | ECES2EU391H |
|             |                        | 25           | 40             | 1.20                                           | 0.15                        | ECES2EU391M |
|             | 470                    | 25           | 50             | 1.30                                           | 0.15                        | ECES2EU471N |
|             |                        | 30           | 35             | 1.30                                           | 0.15                        | ECES2EU471S |
|             |                        | 35           | 31.5           | 1.30                                           | 0.15                        | ECES2EU471X |
|             | 560                    | 25           | 50             | 1.42                                           | 0.15                        | ECES2EU561N |
|             |                        | 30           | 40             | 1.42                                           | 0.15                        | ECES2EU561T |
|             | 680                    | 30           | 50             | 1.50                                           | 0.15                        | ECES2EU681U |
|             |                        | 35           | 40             | 1.50                                           | 0.15                        | ECES2EU681Y |
|             | 820                    | 30           | 50             | 1.65                                           | 0.15                        | ECES2EU821U |
| 350         | 56                     | 22           | 25             | 0.25                                           | 0.15                        | ECES2VU560D |
|             | 68                     | 22           | 25             | 0.28                                           | 0.15                        | ECES2VU680D |
|             | 82                     | 22           | 31.5           | 0.35                                           | 0.15                        | ECES2VU820E |
|             |                        | 25           | 25             | 0.35                                           | 0.15                        | ECES2VU820J |
|             | 100                    | 22           | 31.5           | 0.39                                           | 0.15                        | ECES2VU101E |
|             | 120                    | 22           | 35             | 0.47                                           | 0.15                        | ECES2VU121F |
|             |                        | 25           | 31.5           | 0.47                                           | 0.15                        | ECES2VU121K |
|             |                        | 30           | 25             | 0.47                                           | 0.15                        | ECES2VU121Q |
|             | 150                    | 22           | 40             | 0.50                                           | 0.15                        | ECES2VU151G |
|             |                        | 25           | 35             | 0.50                                           | 0.15                        | ECES2VU151L |
|             |                        | 30           | 25             | 0.50                                           | 0.15                        | ECES2VU151Q |
|             | 180                    | 25           | 40             | 0.60                                           | 0.15                        | ECES2VU181M |
|             |                        | 30           | 31.5           | 0.60                                           | 0.15                        | ECES2VU181R |
|             | 220                    | 22           | 50             | 0.66                                           | 0.15                        | ECES2VU221H |
|             |                        | 25           | 50             | 0.66                                           | 0.15                        | ECES2VU221N |
|             |                        | 30           | 35             | 0.66                                           | 0.15                        | ECES2VU221S |
|             |                        | 35           | 25             | 0.66                                           | 0.15                        | ECES2VU221W |
|             | 270                    | 25           | 50             | 0.75                                           | 0.15                        | ECES2VU271N |
|             |                        | 30           | 40             | 0.75                                           | 0.15                        | ECES2VU271T |

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■ Standard Products

| W.V.<br>(V) | Cap.<br>(±20%)<br>(μF) | Case size    |                | Specification                                  |                             | Part No.    |
|-------------|------------------------|--------------|----------------|------------------------------------------------|-----------------------------|-------------|
|             |                        | Dia.<br>(mm) | Length<br>(mm) | Ripple<br>current<br>(120Hz)<br>(+85°C)<br>(A) | tan.δ<br>(120Hz)<br>(+20°C) |             |
| 200         | 1000                   | 30           | 50             | 1.80                                           | 0.15                        | ECES2DU102U |
|             |                        | 35           | 40             | 1.80                                           | 0.15                        | ECES2DU102Y |
| 250         | 120                    | 22           | 25             | 0.45                                           | 0.15                        | ECES2EU121D |
|             |                        | 22           | 31.5           | 0.65                                           | 0.15                        | ECES2EU151E |
|             |                        | 25           | 25             | 0.65                                           | 0.15                        | ECES2EU151J |
|             | 180                    | 22           | 31.5           | 0.71                                           | 0.15                        | ECES2EU181E |
|             |                        | 22           | 35             | 0.87                                           | 0.15                        | ECES2EU221F |
|             |                        | 25           | 31.5           | 0.87                                           | 0.15                        | ECES2EU221K |
|             | 220                    | 30           | 25             | 0.87                                           | 0.15                        | ECES2EU221Q |
|             |                        | 22           | 40             | 0.96                                           | 0.15                        | ECES2EU271G |
|             |                        | 25           | 35             | 0.96                                           | 0.15                        | ECES2EU271L |
|             | 270                    | 30           | 25             | 0.96                                           | 0.15                        | ECES2EU271Q |
|             |                        | 22           | 50             | 1.10                                           | 0.15                        | ECES2EU331H |
|             |                        | 25           | 40             | 1.10                                           | 0.15                        | ECES2EU331M |
|             | 330                    | 30           | 31.5           | 1.10                                           | 0.15                        | ECES2EU331R |
|             |                        | 35           | 25             | 1.10                                           | 0.15                        | ECES2EU331W |
|             | 390                    | 22           | 50             | 1.20                                           | 0.15                        | ECES2EU391H |
|             |                        | 25           | 40             | 1.20                                           | 0.15                        | ECES2EU391M |
|             | 470                    | 25           | 50             | 1.30                                           | 0.15                        | ECES2EU471N |
|             |                        | 30           | 35             | 1.30                                           | 0.15                        | ECES2EU471S |
|             |                        | 35           | 31.5           | 1.30                                           | 0.15                        | ECES2EU471X |
|             | 560                    | 25           | 50             | 1.42                                           | 0.15                        | ECES2EU561N |
|             |                        | 30           | 40             | 1.42                                           | 0.15                        | ECES2EU561T |
|             | 680                    | 30           | 50             | 1.50                                           | 0.15                        | ECES2EU681U |
|             |                        | 35           | 40             | 1.50                                           | 0.15                        | ECES2EU681Y |
|             | 820                    | 30           | 50             | 1.65                                           | 0.15                        | ECES2EU821U |
| 350         | 56                     | 22           | 25             | 0.25                                           | 0.15                        | ECES2VU560D |
|             | 68                     | 22           | 25             | 0.28                                           | 0.15                        | ECES2VU680D |
|             | 82                     | 22           | 31.5           | 0.35                                           | 0.15                        | ECES2VU820E |
|             |                        | 25           | 25             | 0.35                                           | 0.15                        | ECES2VU820J |
|             | 100                    | 22           | 31.5           | 0.39                                           | 0.15                        | ECES2VU101E |
|             | 120                    | 22           | 35             | 0.47                                           | 0.15                        | ECES2VU121F |
|             |                        | 25           | 31.5           | 0.47                                           | 0.15                        | ECES2VU121K |
|             |                        | 30           | 25             | 0.47                                           | 0.15                        | ECES2VU121Q |
|             | 150                    | 22           | 40             | 0.50                                           | 0.15                        | ECES2VU151G |
|             |                        | 25           | 35             | 0.50                                           | 0.15                        | ECES2VU151L |
|             |                        | 30           | 25             | 0.50                                           | 0.15                        | ECES2VU151Q |
|             | 180                    | 25           | 40             | 0.60                                           | 0.15                        | ECES2VU181M |
|             |                        | 30           | 31.5           | 0.60                                           | 0.15                        | ECES2VU181R |
|             | 220                    | 22           | 50             | 0.66                                           | 0.15                        | ECES2VU221H |
|             |                        | 25           | 50             | 0.66                                           | 0.15                        | ECES2VU221N |
|             |                        | 30           | 35             | 0.66                                           | 0.15                        | ECES2VU221S |
|             |                        | 35           | 25             | 0.66                                           | 0.15                        | ECES2VU221W |
|             | 270                    | 25           | 50             | 0.75                                           | 0.15                        | ECES2VU271N |
|             |                        | 30           | 40             | 0.75                                           | 0.15                        | ECES2VU271T |

Discontinued

Design, Specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use. Whenever a doubt about safety arises from this product, please inform us immediately for technical consultation without fail.

Discontinued

■ Standard Products

| W.V.<br>(V) | Cap.<br>(±20%)<br>(μF) | Case size    |                | Specification                                  |                             | Part No.    |
|-------------|------------------------|--------------|----------------|------------------------------------------------|-----------------------------|-------------|
|             |                        | Dia.<br>(mm) | Length<br>(mm) | Ripple<br>current<br>(120Hz)<br>(+85°C)<br>(A) | tan.δ<br>(120Hz)<br>(+20°C) |             |
| 450         | 150                    | 30           | 35             | 0.70                                           | 0.15                        | ECES2WU151S |
|             |                        | 35           | 25             | 0.70                                           | 0.15                        | ECES2WU151W |
|             | 180                    | 25           | 50             | 0.77                                           | 0.15                        | ECES2WU181N |
|             |                        | 30           | 40             | 0.77                                           | 0.15                        | ECES2WU181T |
|             |                        | 35           | 31.5           | 0.77                                           | 0.15                        | ECES2WU181X |
|             | 220                    | 30           | 50             | 0.92                                           | 0.15                        | ECES2WU221U |
|             |                        | 35           | 35             | 0.92                                           | 0.15                        | ECES2WU221V |
|             | 270                    | 30           | 50             | 1.02                                           | 0.15                        | ECES2WU271U |
|             |                        | 35           | 40             | 1.02                                           | 0.15                        | ECES2WU271Y |