

## REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 501)

## PHYSICAL CHARACTERISTICS

-INSULATOR MATERIAL: THERMOPLASTIC UL94V0

-CONTACT MATERIAL: PHOSPHOR BRONZE  
GOLD OVER NICKEL

-ACCESSORIES: BRASS ,cadmium plated yellow passivation

-SHELLS: STEEL ,cadmium plated yellow passivation

## ELECTRICAL CHARACTERISTICS

-NOMINAL CURRENT: 7.5A

-CONTACT RESISTANCE: <= 7.3 m ohms

-CONTACT/CONTACT : >=1000 V

-CONTACT/GROUND : >=1200 V

-INSULATION RESISTANCE: >=5000 MOhms

## ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: 55/125/56

TEMPERATURE RANGE -55°C TO +125°C

DAMP HEAT STEADY STATE 56 DAYS

SALT SPRAY 48 HOURS

## MECHANICAL CHARACTERISTICS

- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m minimum

- Female screw : 0.5 N.m minimum

Series

# DBML25S300

Shell size: **E A B C D**  
see sheet 2

Front accessory definition  
see sheet 2

**Blank** :without accessory

**F** :floating mounting

**L** :threaded insert M3

**O** :threaded insert UNC 4-40

**V** :female screw UNC 4-40

**S** :spacer

Contact number (see sheet 2)

**9,15,25,37,50**

Contacts

**S** :Socket

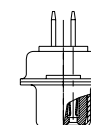
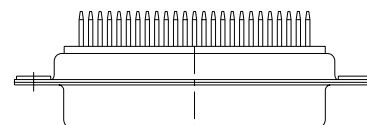
Termination type

**3** :Straight version

Plating

**00** : 500 matings/unmatings

**43** : 500 matings/unmatings for harsh environment



25 WAY for Example

| rev | ecn no       | dr         | date |
|-----|--------------|------------|------|
| A   | LS06-0174MPE | 2006/11/06 |      |
| B   | LS07-0273MPE | 2007/10/30 |      |
| -   | -            | -          | -    |
| -   | -            | -          | -    |
| -   | -            | -          | -    |
| -   | -            | -          | -    |
| -   | -            | -          | -    |

|                    |  |                                       |        |               |            |               |              |
|--------------------|--|---------------------------------------|--------|---------------|------------|---------------|--------------|
| www.fciconnect.com |  | surface                               | -      | tolerance std | projection | mm            |              |
|                    |  | ISO 1302                              | ✓      | ISO 406       | ISO 1101   |               |              |
|                    |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |        |               |            |               |              |
|                    |  | ANGULAR                               | LINEAR | 0.X           | ±0.3       | size          | Scale        |
|                    |  |                                       |        | 0.XX          | ±0.1       | A2            | 2:1          |
|                    |  | 0° ±2°                                |        | 0.XXX         | ±0.05      | ECN           | LS07-0273    |
|                    |  | Product family                        |        |               |            | Spec.ref      |              |
|                    |  | SUB FEMALE DM HE501 series            |        |               |            | C01-8637-1734 | Rev.         |
|                    |  | with straight solder contact          |        |               |            | B             |              |
|                    |  | catalog no                            |        |               |            | CUSTOMER      | sheet 1 of 4 |



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1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

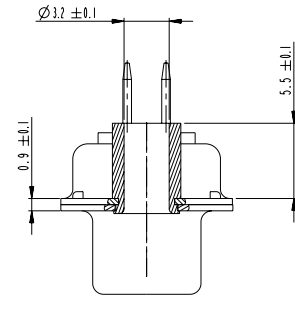
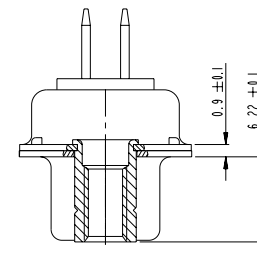
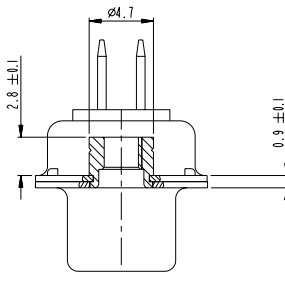
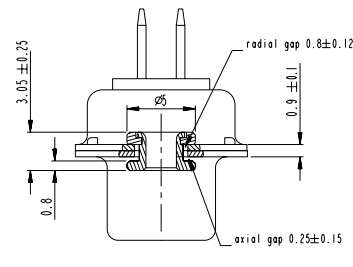
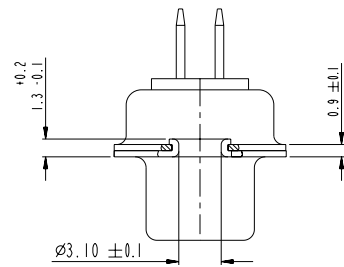
B

C

D

E

F



|                 |               |                     |                                  |                         |          |
|-----------------|---------------|---------------------|----------------------------------|-------------------------|----------|
| FRONT ACCESSORY | Blank without | F floating mounting | L insert M3<br>O insert UNC 4.40 | V female screw UNC 4.40 | S spacer |
|-----------------|---------------|---------------------|----------------------------------|-------------------------|----------|

| PART NUMBER | FRONT ACCESSORY       |
|-------------|-----------------------|
| D*MxxS300   | without               |
| D*MFxxS300  | floating mounting     |
| D*MLxxS300  | insert M3             |
| D*MOxxS300  | insert UNC 4.40       |
| D*MVxxS300  | female screw UNC 4.40 |
| D*MSxxS300  | spacer                |

| PART NUMBER | FRONT ACCESSORY       |
|-------------|-----------------------|
| D*MxxS343   | without               |
| D*MFxxS343  | floating mounting     |
| D*MLxxS343  | insert M3             |
| D*MOxxS343  | insert UNC 4.40       |
| D*MVxxS343  | female screw UNC 4.40 |
| D*MSxxS343  | spacer                |

| shell size | Contact number |
|------------|----------------|
| #          | XX             |
| E          | 09             |
| A          | 15             |
| B          | 25             |
| C          | 37             |
| D          | 50             |

CROSS REFERENCES HE501 and FC1

| HE501 P/N   | FC1 P/N    | FRONT ACCESSORY   |
|-------------|------------|-------------------|
| HE501NxxYS4 | D*MxxS300  | without           |
| HE501FxxYS4 | D*MFxxS300 | floating mounting |

SCALE: 4

|                    |          |                                                            |                                   |                       |                 |
|--------------------|----------|------------------------------------------------------------|-----------------------------------|-----------------------|-----------------|
| www.fciconnect.com |          | surface<br>ISO 1302                                        | tolerance std<br>ISO 406 ISO 1101 | projection<br>size A2 | mm<br>Scale 2:1 |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED                      |                                   |                       |                 |
| Dr                 | M PESSON | 2006/11/06                                                 | ANGULAR                           | 0.X                   | ±0.3            |
| Eng                | P LEGARE | 2006/11/06                                                 | LINEAR                            | 0.XX                  | ±0.1            |
| Chr                | P LEGARE | 2006/11/06                                                 | 0° ±2°                            | 0.XXX                 | ±0.05           |
| Appr               | P LEGARE | 2006/11/06                                                 | Product family                    | ECN LS07-0273         |                 |
|                    |          |                                                            |                                   | Spec ref              |                 |
| FCI                |          | SUB FEMALE DM HE501 series<br>with straight solder contact |                                   | cat no                | Rev. B          |
|                    |          |                                                            |                                   | CUSTOMER              | sheet 2 of 4    |



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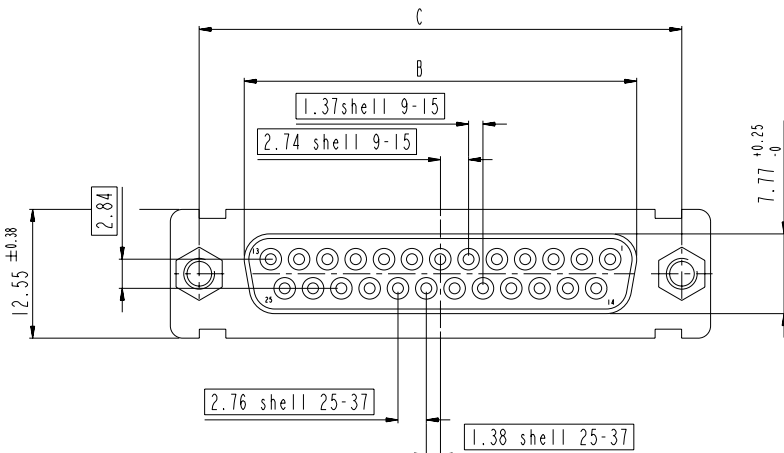
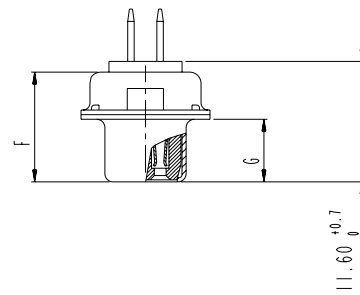
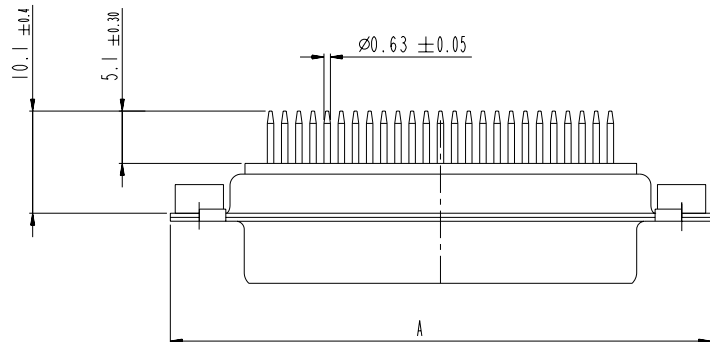
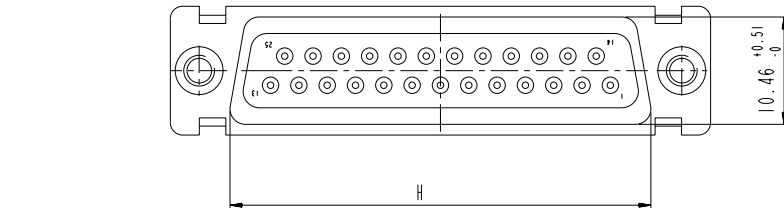
REV 7 - 2006-04-17

1 2 3 4 5 6 7 8

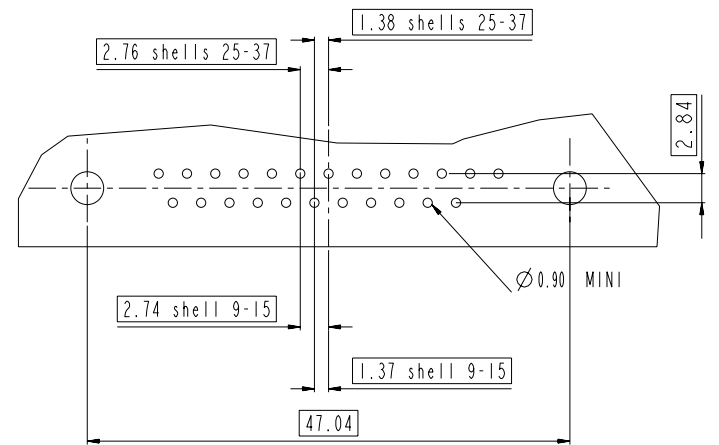
# DIMENSIONS FOR SHELL E,A,B,C

Dimensions are in millimeters

| Shell size | Number of contacts | A <sup>+0.76</sup> <sub>-0</sub> | B <sup>+0.25</sup> <sub>-0</sub> | C $\pm 0.12$ | F <sup>+0.57</sup> <sub>-0</sub> | G <sup>+0.25</sup> <sub>-0</sub> | H <sup>+0.51</sup> <sub>-0</sub> |
|------------|--------------------|----------------------------------|----------------------------------|--------------|----------------------------------|----------------------------------|----------------------------------|
| E          | 09                 | 30.43                            | 16.21                            | 24.99        | 10.64                            | 6.05                             | 19.02                            |
| A          | 15                 | 38.76                            | 24.54                            | 33.32        | 10.64                            | 6.05                             | 27.25                            |
| B          | 25                 | 52.65                            | 38.25                            | 47.04        | 10.64                            | 6.05                             | 41.02                            |
| C          | 37                 | 68.94                            | 54.71                            | 63.50        | 10.64                            | 6.05                             | 57.45                            |



## LAYOUT AND CONNECTOR DIMENSIONS



|                    |          |                                       |                |                              |          |          |               |           |
|--------------------|----------|---------------------------------------|----------------|------------------------------|----------|----------|---------------|-----------|
| www.fciconnect.com |          | surface                               | ISO 1302       | tolerance std                | ISO 406  | ISO 1101 | projection    | mm        |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                |                              |          |          | size          | Scale     |
| Dr                 | M PESSON | 2006/11/06                            | ANGULAR        | 0.X                          | ±0.3     |          | A2            | 2:1       |
| Eng                | P LEGARE | 2006/11/06                            | LINEAR         | 0.XX                         | ±0.1     |          | ECN           | LS07-0273 |
| Chr                | P LEGARE | 2006/11/06                            | 0° ±2°         | 0.XXX                        | ±0.05    |          | Spec ref      |           |
| Appr               | P LEGARE | 2006/11/06                            | Product family |                              |          |          |               |           |
| FCI                |          | SUB FEMALE DM HE501 series            |                | with straight solder contact |          | deg no   | C01-8637-1734 | Rev. B    |
|                    |          | catalog no                            |                |                              | CUSTOMER |          | sheet 3 of 4  |           |

