

## REFERENCE SPECIFICATIONS

MIL-DTL-24308 FOR DIMENSIONS

NFC-93425 FOR CHARACTERISTICS

## PHYSICAL CHARACTERISTICS

-INSULATOR MATERIAL: THERMOPLASTIC UL94V0

-CONTACT MATERIAL: PHOSPHOR BRONZE  
GOLD OVER NICKEL

-ACCESSORIES: STEEL FOR METAL BRACKETS,  
cadmium plated yellow passivation  
THERMOPLASTIC UL94V0 FOR PLASTIC BRACKETS

BRASS FOR OTHERS ACCESSORIES,  
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 min

-Female screw:0.5 N.m min

Series

# DBML25S700M

Shell size: **E A B C D**  
(see sheet 3)

Front accessory definition  
(see sheet 2)

**Blank** :without accessory  
**L** :threaded insert M3  
**O** :threaded insert UNC 4-40  
**V** :female screw UNC 4-40

Layout of contacts (see sheet 3)

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

Contacts

**S** Socket

Termination type

**7** Right angle/US foot print

Plating

**00** Right angle 500 matings/unmatings

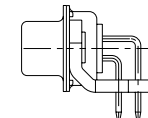
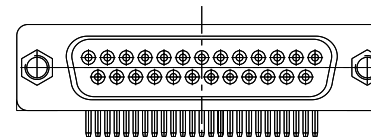
**43** Right angle 500 matings/unmatings  
for harsh environment

PCB accessories definition(see sheet 2)

**Blank** :Plastic brackets

**C** :Without brackets

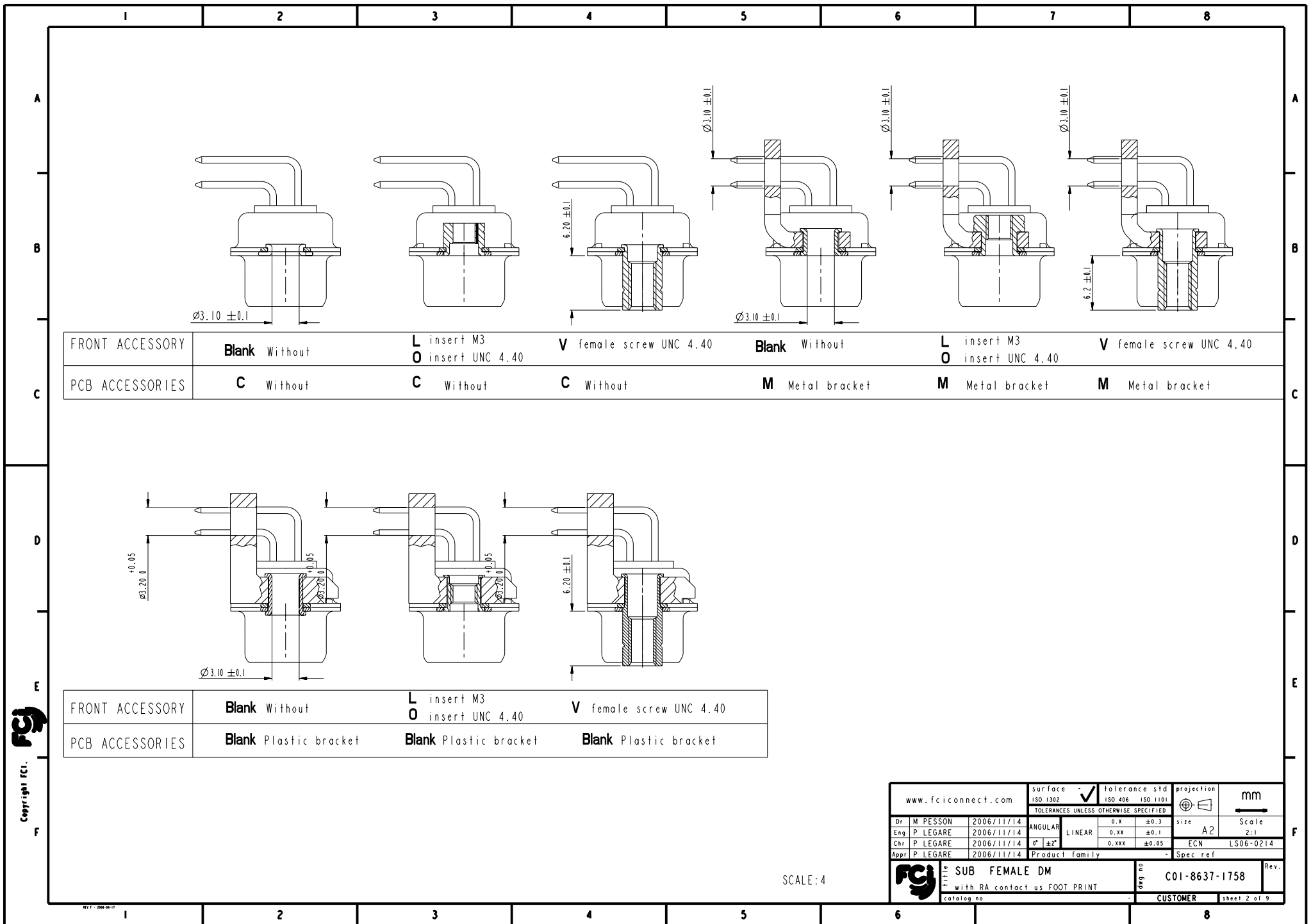
**M** :Metal brackets



25 WAY for Example

| rev | ech no        | dr | date       |
|-----|---------------|----|------------|
| A   | LS06-0214 MPE |    | 2006/12/13 |
| -   | -             | -  | -          |
| -   | -             | -  | -          |
| -   | -             | -  | -          |
| -   | -             | -  | -          |
| -   | -             | -  | -          |
| -   | -             | -  | -          |
| -   | -             | -  | -          |
| -   | -             | -  | -          |

|                                                                                       |          |            |                                                                                          |        |       |                                                                                                     |      |                                                                                          |              |
|---------------------------------------------------------------------------------------|----------|------------|------------------------------------------------------------------------------------------|--------|-------|-----------------------------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------------|--------------|
| www.fciconnect.com                                                                    |          |            | surface - <input checked="" type="checkbox"/> tolerance std<br>ISO 1302 ISO 406 ISO 1101 |        |       | projection<br> |      |  mm |              |
| TOLERANCES UNLESS OTHERWISE SPECIFIED                                                 |          |            |                                                                                          |        |       |                                                                                                     |      |                                                                                          |              |
| Dr                                                                                    | M PESSON | 2006/11/14 | ANGULAR                                                                                  | LINEAR | 0.X   | ±0.3                                                                                                | size | A2                                                                                       | Scale        |
| Eng                                                                                   | P LEGARE | 2006/11/14 |                                                                                          |        | 0.XX  | ±0.1                                                                                                |      |                                                                                          | 2:1          |
| Chr                                                                                   | P LEGARE | 2006/11/14 | 0° ±2°                                                                                   |        | 0.XXX | ±0.05                                                                                               | ECN  | LS06-0214                                                                                |              |
| Appr                                                                                  | P LEGARE | 2006/11/14 | Product family                                                                           |        |       | - Spec ref                                                                                          |      |                                                                                          |              |
|  |          |            | SUB FEMALE DM                                                                            |        |       | C01-8637-1758                                                                                       |      |                                                                                          | Rev.         |
| with RA contact us FOOT PRINT                                                         |          |            |                                                                                          |        |       | CUSTOMER                                                                                            |      |                                                                                          | sheet 1 of 9 |



|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
|   | I | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| A |   |   |   |   |   |   |   |   |
| B |   |   |   |   |   |   |   |   |
| C |   |   |   |   |   |   |   |   |
| D |   |   |   |   |   |   |   |   |
| E |   |   |   |   |   |   |   |   |
| F |   |   |   |   |   |   |   |   |

| PART NUMBER | FRONT ACCESSORY       | PCB ACCESSORY   |
|-------------|-----------------------|-----------------|
| D*MxxS700C  | without               | without         |
| D*MLxxS700C | insert M3             | without         |
| D*MOxxS700C | insert UNC 4.40       | without         |
| D*MVxxS700C | female screw UNC 4.40 | without         |
| D*MxxS700M  | without               | Metal bracket   |
| D*MLxxS700M | insert M3             | Metal bracket   |
| D*MOxxS700M | insert UNC 4.40       | Metal bracket   |
| D*MVxxS700M | female screw UNC 4.40 | Metal bracket   |
| D*MxxS700   | without               | Plastic bracket |
| D*MLxxS700  | insert M3             | Plastic bracket |
| D*MOxxS700  | insert UNC 4.40       | Plastic bracket |
| D*MVxxS700  | female screw UNC 4.40 | Plastic bracket |

shell size

XX

E

09

A

15

B

25

C

37

D

50

| PART NUMBER | FRONT ACCESSORY       | PCB ACCESSORY   |
|-------------|-----------------------|-----------------|
| D*MxxS743C  | without               | without         |
| D*MLxxS743C | insert M3             | without         |
| D*MOxxS743C | insert UNC 4.40       | without         |
| D*MVxxS743C | female screw UNC 4.40 | without         |
| D*MxxS743M  | without               | Metal bracket   |
| D*MLxxS743M | insert M3             | Metal bracket   |
| D*MOxxS743M | insert UNC 4.40       | Metal bracket   |
| D*MVxxS743M | female screw UNC 4.40 | Metal bracket   |
| D*MxxS743   | without               | Plastic bracket |
| D*MLxxS743  | insert M3             | Plastic bracket |
| D*MOxxS743  | insert UNC 4.40       | Plastic bracket |
| D*MVxxS743  | female screw UNC 4.40 | Plastic bracket |

www.fciconnect.com

surface -  
ISO 1302 ✓  
TOLERANCES UNLESS OTHERWISE SPECIFIED

tolerance std  
ISO 406 ISO 1101  
0.X ±0.3  
0.XX ±0.1  
0.XXX ±0.05

projection  
size A2  
ECN LS06-0214  
Spec.ref

mm  
Scale 2:1

Dr M PESSON 2006/11/14  
Eng P LEGARE 2006/11/14  
Chr P LEGARE 2006/11/14  
Appr P LEGARE 2006/11/14

Product family

FCI

Sub FEMALE DM  
with RA contact us FOOT PRINT

deg no

C01-8637-1758

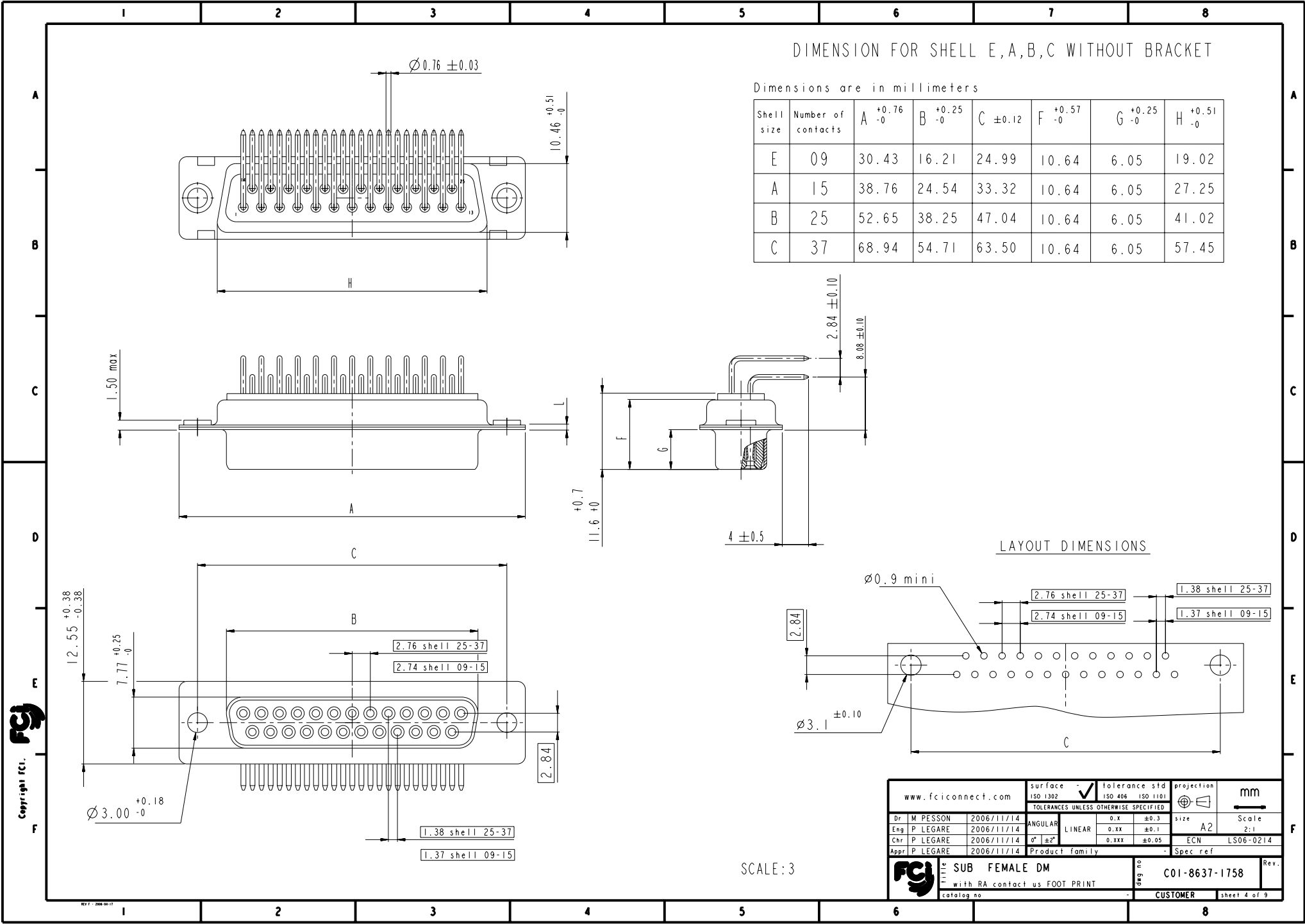
Rev.

catalog no

CUSTOMER

sheet 3 of 9

REV 7 - 2006-09-17



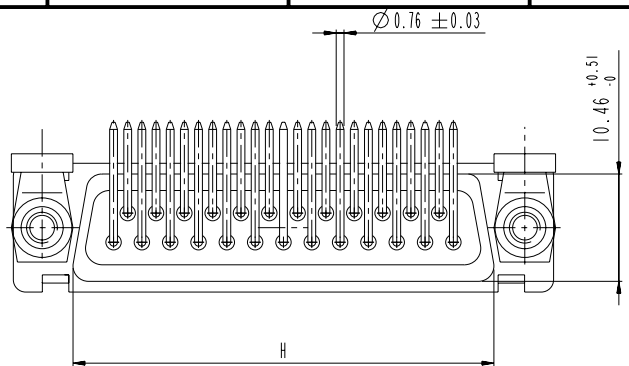
DIMENSION FOR SHELL E,A,B,C WITHOUT BRACKET

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 DIMENSIONS

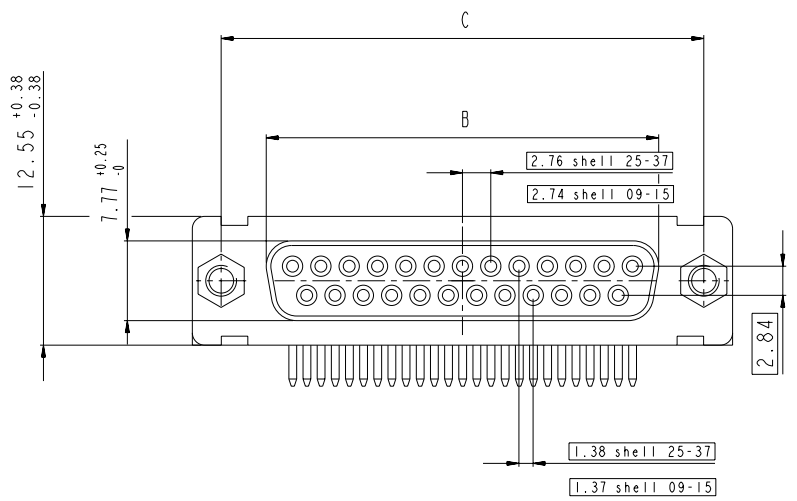
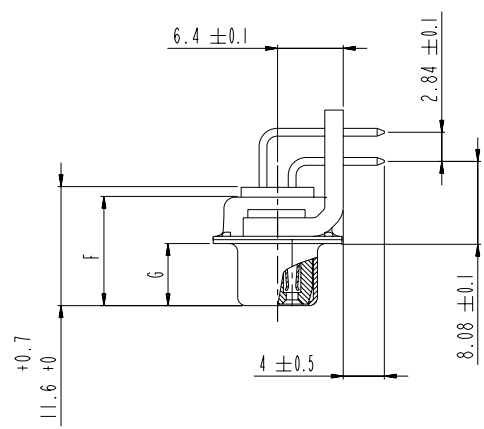
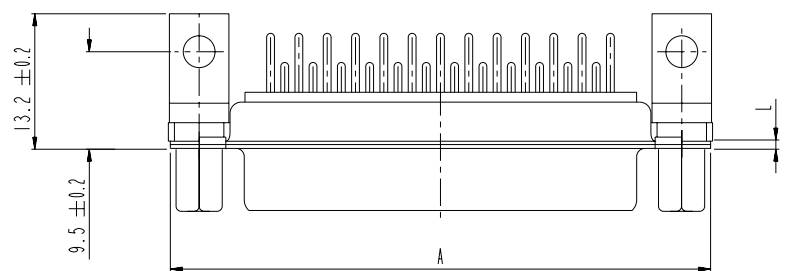
|                               |          |                                       |                       |               |            |
|-------------------------------|----------|---------------------------------------|-----------------------|---------------|------------|
| www.fciconnect.com            |          | surface -                             | tolerance std         | projection    | mm         |
|                               |          | ISO 1302                              | ISO 406               | ISO 1101      |            |
|                               |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                       |               |            |
| Dr                            | M PESSON | 2006/11/14                            | ANGULAR               | 0.X           | $\pm 0.3$  |
| Eng                           | P LEGARE | 2006/11/14                            | LINEAR                | 0.XX          | $\pm 0.1$  |
| Chr                           | P LEGARE | 2006/11/14                            | $0^\circ \pm 2^\circ$ | 0.XXX         | $\pm 0.05$ |
| Appr                          | P LEGARE | 2006/11/14                            | Product family        | - Spec ref    |            |
| SUB FEMALE DM                 |          | deg no                                |                       | C01-8637-1758 |            |
| with RA contact us FOOT PRINT |          | CUSTOMER                              |                       | sheet 4 of 9  |            |



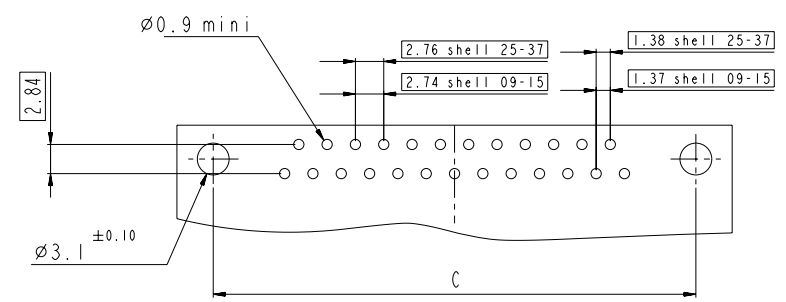
# DIMENSION FOR SHELL E,A,B,C WITH METAL BRACKET

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 ±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 DIMENSIONS

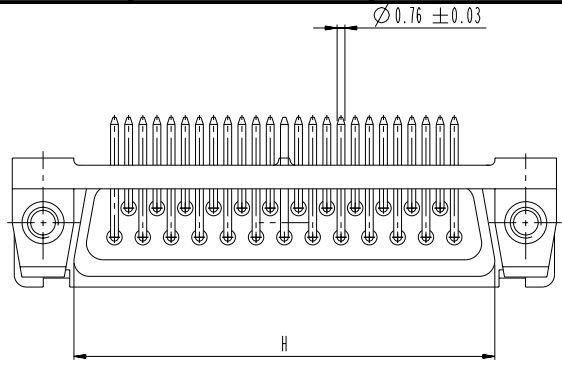


SCALE: 3

|                               |            |                                       |               |               |               |
|-------------------------------|------------|---------------------------------------|---------------|---------------|---------------|
| www.fciconnect.com            |            | surface -                             | tolerance std | projection    | mm            |
|                               |            | ISO 1302                              | ISO 406       | ISO 1101      |               |
|                               |            | TOLERANCES UNLESS OTHERWISE SPECIFIED |               |               |               |
| Dr M PESSON                   | 2006/11/14 | ANGULAR                               | 0.X           | ±0.3          | size A2       |
| Eng P LEGARE                  | 2006/11/14 | LINEAR                                | 0.XX          | ±0.1          | Scale 2:1     |
| Chr P LEGARE                  | 2006/11/14 | 0° ±2°                                | 0.XXX         | ±0.05         | ECN LS06-0214 |
| Appr P LEGARE                 | 2006/11/14 | Product family                        | Spec ref      |               |               |
| SUB FEMALE DM                 |            | deg no                                |               | C01-8637-1758 |               |
| with RA contact us FOOT PRINT |            | catalog no                            |               | CUSTOMER      |               |
|                               |            |                                       |               | sheet 5 of 9  |               |

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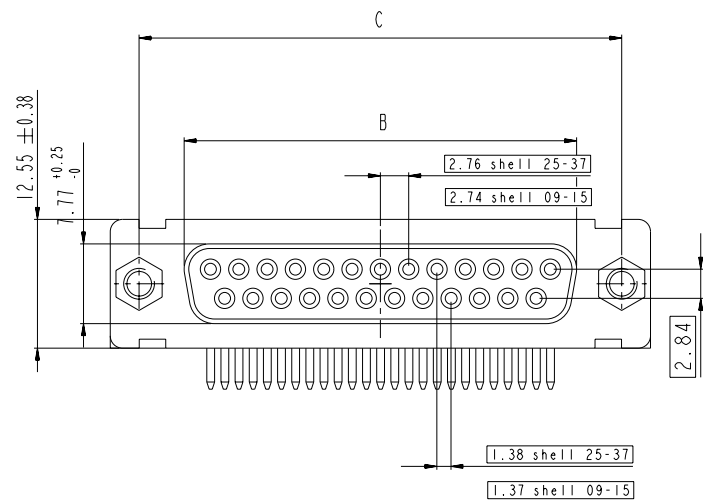
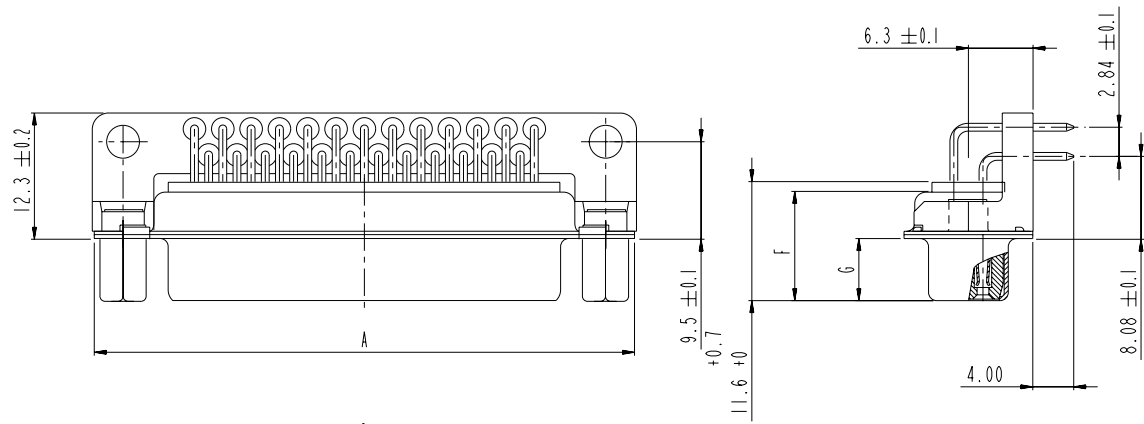
I 2 3 4 5 6 7 8



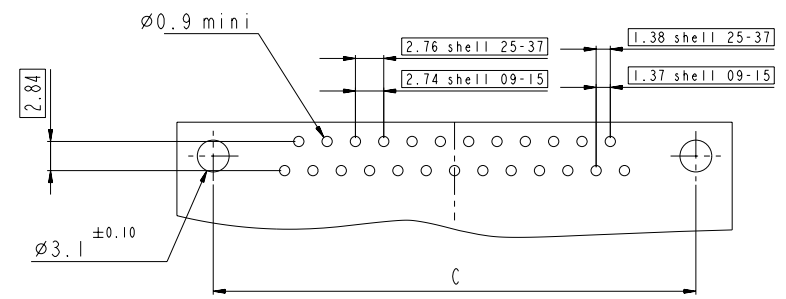
DIMENSION FOR SHELL E,A,B,C WITH PLASTIC BRACKET

Dimensions are in millimeters

| Shell size | Number of contacts | A <sup>+0.76<br/>-0</sup> | B <sup>+0.25<br/>-0</sup> | C ±0.12 | F <sup>+0.57<br/>-0</sup> | G <sup>+0.25<br/>-0</sup> | H <sup>+0.51<br/>-0</sup> |
|------------|--------------------|---------------------------|---------------------------|---------|---------------------------|---------------------------|---------------------------|
| 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                     |

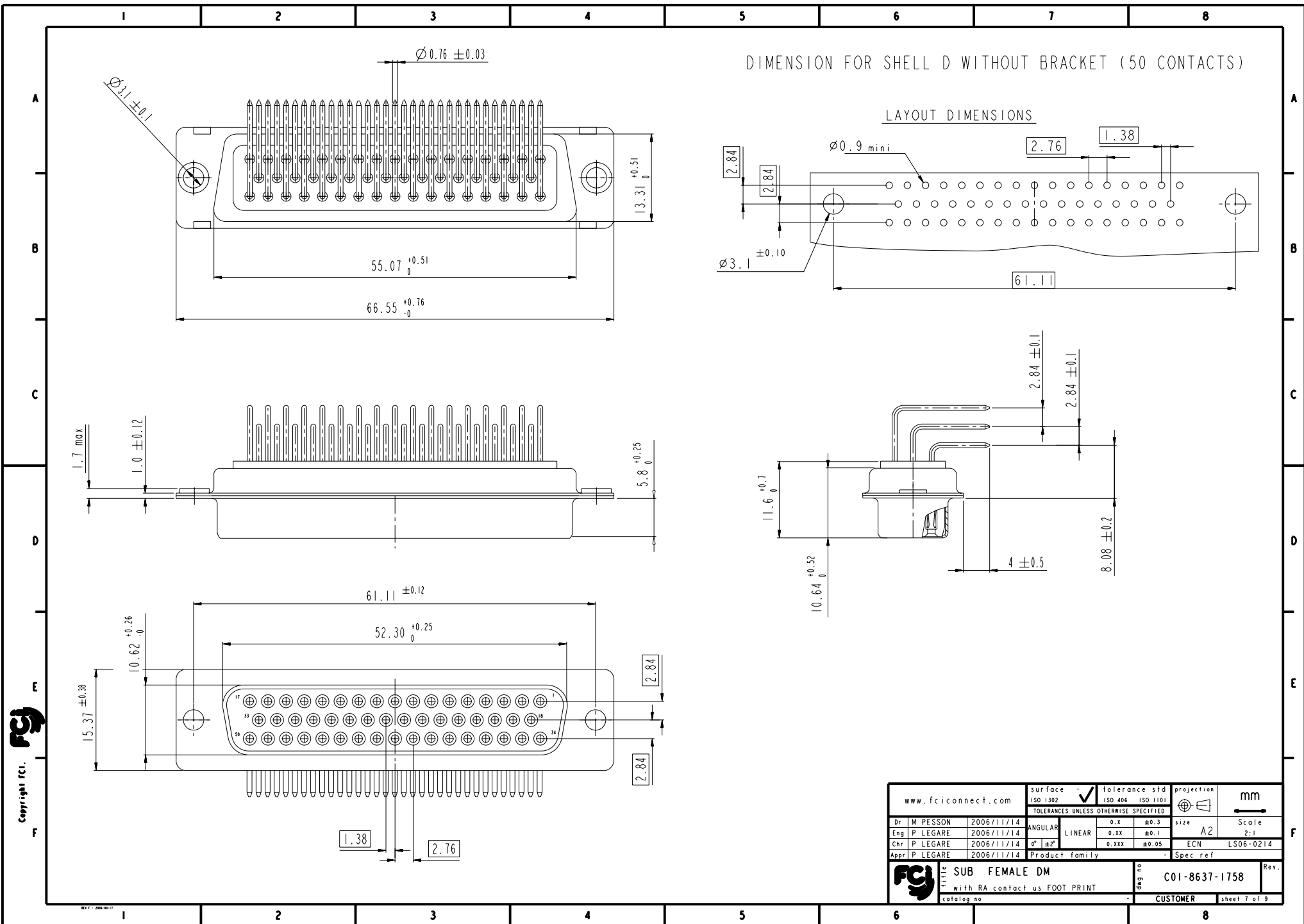


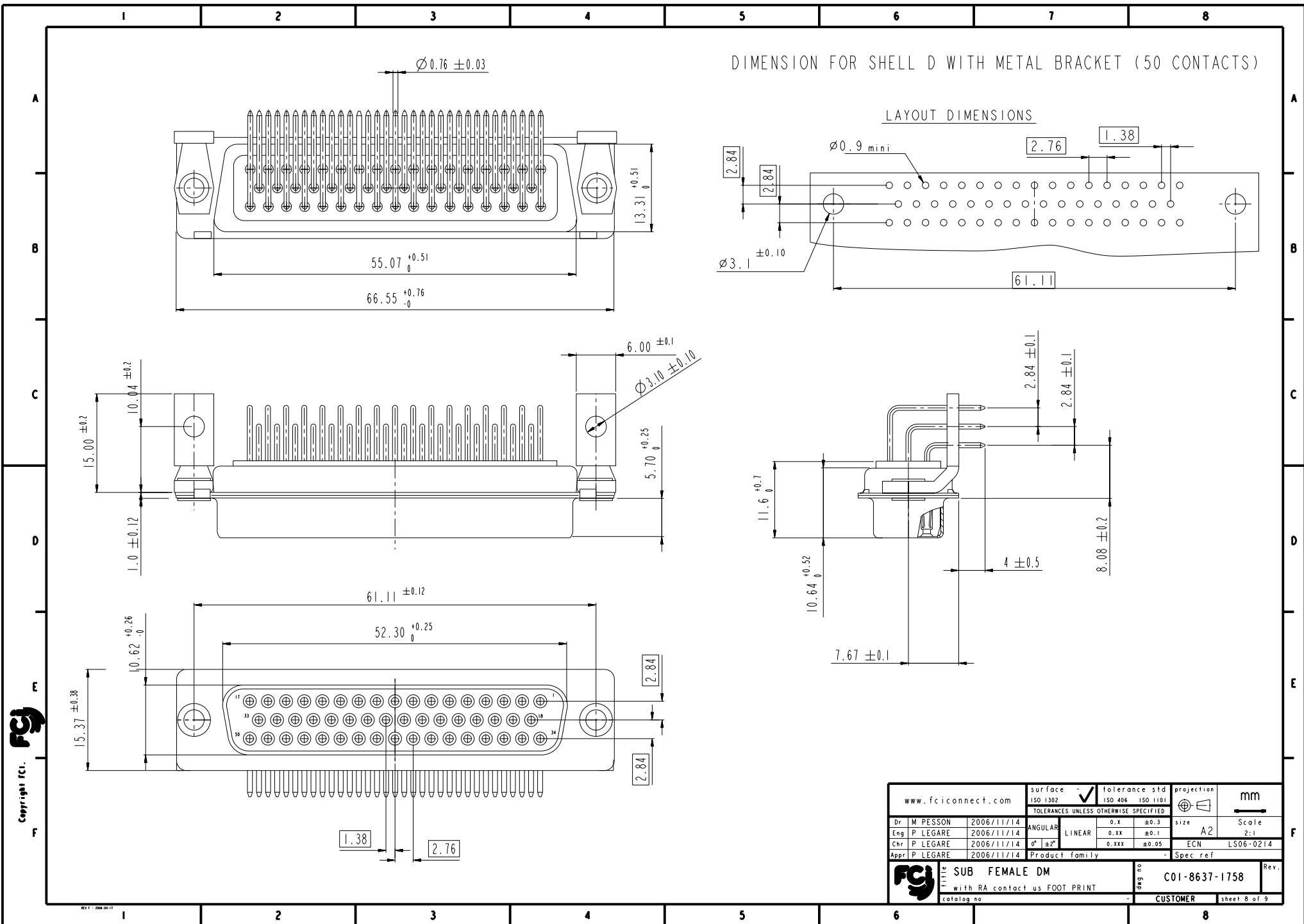
LAYOUT DIMENSIONS



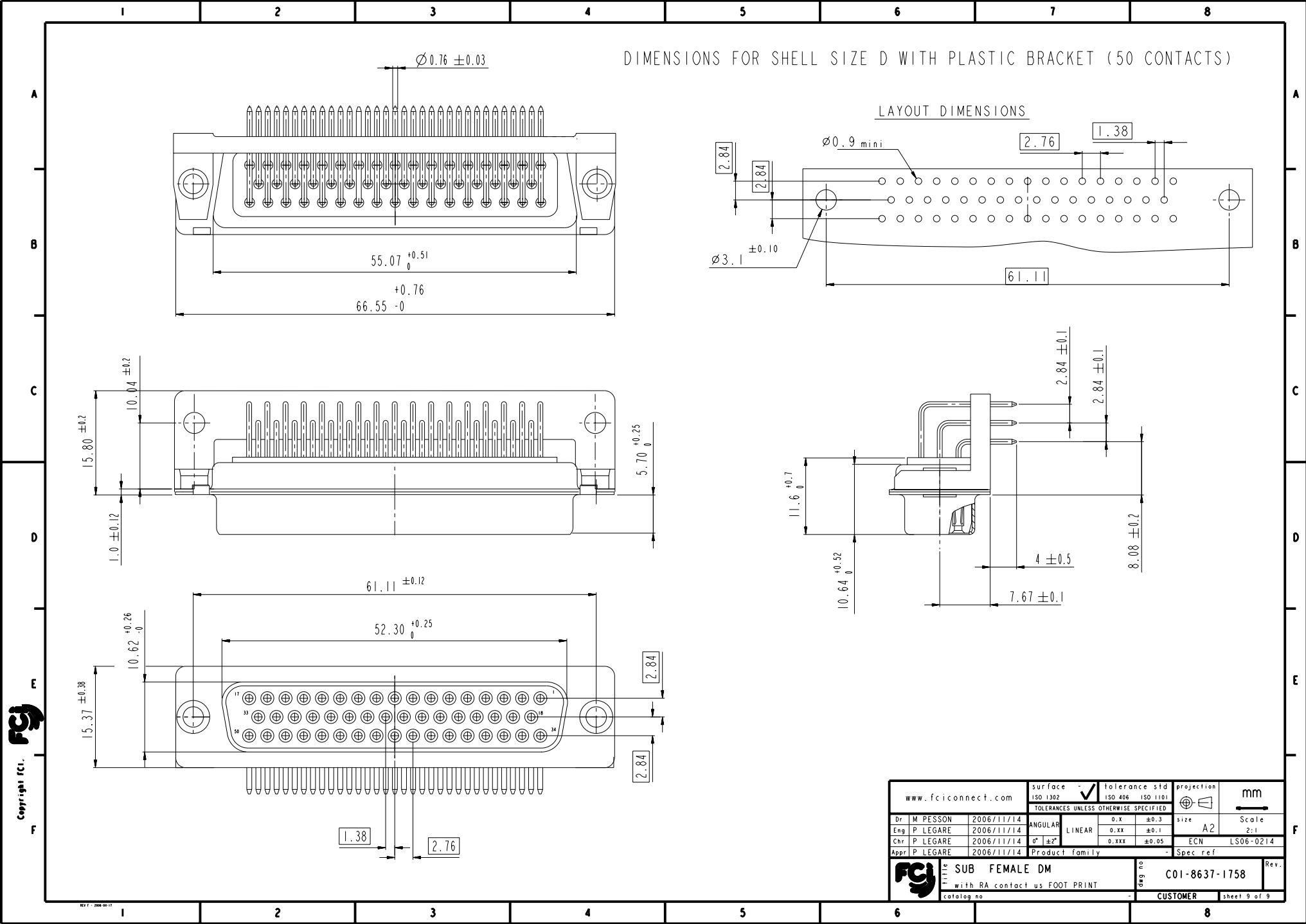
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|                                       |          |            |                    |             |                         |               |                       |  |           |  |  |
|---------------------------------------|----------|------------|--------------------|-------------|-------------------------|---------------|-----------------------|--|-----------|--|--|
| www.fciconnect.com                    |          |            | surface - ISO 1302 |             | tolerance std - ISO 406 |               | projection - ISO 1101 |  | mm        |  |  |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |          |            |                    |             | 0.X ±0.3                |               | size A2               |  | Scale 2:1 |  |  |
| Dr                                    | M PESSON | 2006/11/14 | ANGULAR            | LINEAR      | 0.XX ±0.1               | ECN LS06-0214 |                       |  |           |  |  |
| Chr                                   | P LEGARE | 2006/11/14 | 0° ±2°             | 0.XXX ±0.05 | Spec ref                |               |                       |  |           |  |  |
| Appr                                  | P LEGARE | 2006/11/14 | Product family     |             | SUB FEMALE DM           |               | C01-8637-1758         |  | Rev.      |  |  |
| Title with RA contact us FOOT PRINT   |          |            |                    |             | Customer                |               | sheet 6 of 9          |  |           |  |  |





|                    |          |                                       |                       |                               |            |               |            |           |
|--------------------|----------|---------------------------------------|-----------------------|-------------------------------|------------|---------------|------------|-----------|
| www.fciconnect.com |          | surface                               | ISO 1302              | tolerance std                 | ISO 406    | ISO 1101      | projection | mm        |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                       |                               |            |               |            |           |
| Dr                 | M PESSON | 2006/11/14                            | ANGULAR               | 0.X                           | $\pm 0.3$  |               | size       | A2        |
| Eng                | P LEGARE | 2006/11/14                            | LINEAR                | 0.XX                          | $\pm 0.1$  |               | Scale      | 2:1       |
| Chr                | P LEGARE | 2006/11/14                            | $0^\circ \pm 2^\circ$ | 0.XXX                         | $\pm 0.05$ |               | ECN        | LS06-0214 |
| Appr               | P LEGARE | 2006/11/14                            | Product family        |                               |            |               | Spec ref   |           |
| SUB FEMALE DM      |          | Title                                 |                       | with RA contact us FOOT PRINT |            | C01-8637-1758 |            | Rev.      |
| catalog no         |          |                                       |                       | CUSTOMER                      |            | sheet 8 of 9  |            |           |



|                                                                                       |          |            |                                                                                    |        |                           |            |                                                                                                  |       |                                                                                          |  |  |
|---------------------------------------------------------------------------------------|----------|------------|------------------------------------------------------------------------------------|--------|---------------------------|------------|--------------------------------------------------------------------------------------------------|-------|------------------------------------------------------------------------------------------|--|--|
| www.fciconnect.com                                                                    |          |            | surface <input checked="" type="checkbox"/> tolerance std <input type="checkbox"/> |        | ISO 1302 ISO 406 ISO 1101 |            | projection  |       | mm  |  |  |
| TOLERANCES UNLESS OTHERWISE SPECIFIED                                                 |          |            |                                                                                    |        |                           |            |                                                                                                  |       |                                                                                          |  |  |
| Dr                                                                                    | M PESSON | 2006/11/14 | ANGULAR                                                                            | 0.X    | ±0.3                      | size       |                                                                                                  | Scale |                                                                                          |  |  |
| Eng                                                                                   | P LEGARE | 2006/11/14 | LINEAR                                                                             | 0.XX   | ±0.1                      | A2         |                                                                                                  | 2:1   |                                                                                          |  |  |
| Chr                                                                                   | P LEGARE | 2006/11/14 |                                                                                    | 0° ±2° | 0.XXX                     | ±0.05      | ECN                                                                                              |       | LS06-0214                                                                                |  |  |
| Appr                                                                                  | P LEGARE | 2006/11/14 | Product family                                                                     |        |                           | - Spec ref |                                                                                                  |       |                                                                                          |  |  |
|  |          |            | SUB FEMALE DM                                                                      |        |                           | tag no     |                                                                                                  |       | C01-8637-1758                                                                            |  |  |
|                                                                                       |          |            | with RA contact us FOOT PRINT                                                      |        |                           | -          |                                                                                                  |       | CUSTOMER                                                                                 |  |  |
| catalog no                                                                            |          |            | -                                                                                  |        |                           | CUSTOMER   |                                                                                                  |       | sheet 9 of 9                                                                             |  |  |