

## REFERENCE SPECIFICATIONS

-NFC 93425 (in compliance with HE 507)

## PHYSICAL CHARACTERISTICS

- INSULATOR MATERIAL: THERMOPLASTIC ,UL94V0
- CONTACT MATERIAL: BRASS
- ACCESSORIES: BRASS
- SHELLS: STEEL

## ELECTRICAL CHARACTERISTICS

- NOMINAL CURRENT: 30A
- CONTACT RESISTANCE: <= 7.3 m ohms
- CONTACT/CONTACT : >=1000 V
- CONTACT/GROUND : >=1200 V
- INSULATION RESISTANCE: >=5000 MOhms

## ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: 55/125/21
- TEMPERATURE RANGE -55°C TO +125°C
- DAMP HEAT STEADY STATE 21 DAYS
- SALT SPRAY 24 HOURS

## MECHANICAL CHARACTERISTICS

- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m minimum
- Female screw : 0.5 N.m minimum

## NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-22-008.
- The housing will withstand exposure to 260°C peak temperature for 3.5 seconds in a wave solder application with a 1.6mm minimum thick circuit board. See application notes/procedures if they are available.
- Termination plating spec:
  - Ni 1.27µm+Sn 2.5 to 7.5µm(pure bright)
- Active area plating spec:
  - Ni + Gold
- Shell plating :2 to 4µm Cu + Ni + 3 to 10µm Sn(pure bright)
- Accessories: Sn pure bright + nickel
- Packaging spec: See GS-14-920

Series

# DBL5W5P700G30LF

Shell size: **E A B C**  
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 sheets)

Contacts

**P** :Pin

Termination type  
**7** Right angle/USA

Plating

**00** 200 matings/unmatings  
**43** 500 matings/unmatings

PCB accessories definition  
see sheet 2

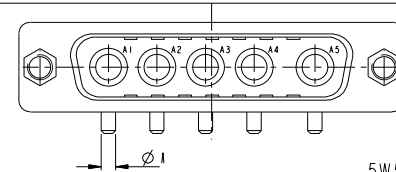
**A** :without accessory  
**H** :Metal brackets+harpoons for PCB 2.40mm  
**G** :Metal brackets+harpoons for PCB 1.60mm  
**M** :Metal brackets

Power contacts

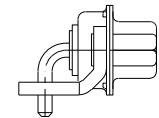
**00** :Not fitted with power contact (signal contacts always fitted)  
**30** :Fitted with power contacts 30 Amp.

TABLE 1:PCB HOLE DIAMETERS

| POWER CONTACTS    |                                 |                    | ACCESSORIES        |
|-------------------|---------------------------------|--------------------|--------------------|
| 30 A              | Ø2.00                           | Ø2.40              | Ø3.10              |
| Max current power | ØA <sup>+0.1</sup> <sub>0</sub> | PCB HOLE<br>+/-0.1 | PCB HOLE<br>+/-0.1 |



5W5 FOR EXAMPLE



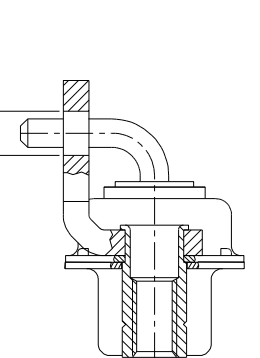
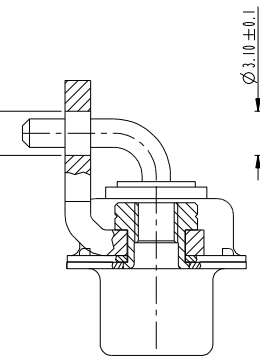
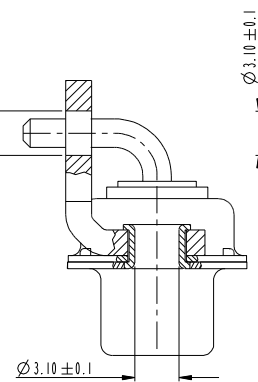
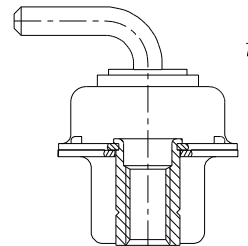
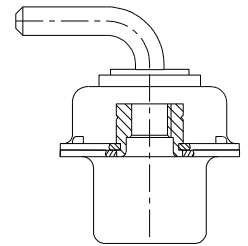
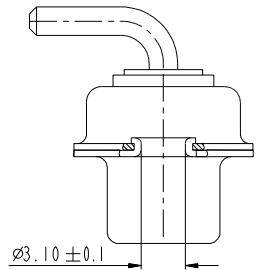
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|--------------------|----------|---------------------------------------|------------------|------------|----------|
| www.fciconnect.com |          | surface                               | tolerance std    | projection | mm       |
|                    |          | ISO 1302                              | ISO 406 ISO 1101 |            |          |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                  |            |          |
| Dr                 | M PESSON | 2005-10-11                            | ANGULAR          | 0.X        | ±0.3     |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR           | 0.XX       | ±0.1     |
| Chr                |          |                                       |                  | 0.XXX      | ±0.05    |
| Appr               |          |                                       | Product family   | -          | Spec ref |

|                                                                                       |           |     |            |            |                                |            |                |        |       |          |          |               |              |      |   |
|---------------------------------------------------------------------------------------|-----------|-----|------------|------------|--------------------------------|------------|----------------|--------|-------|----------|----------|---------------|--------------|------|---|
| Rev                                                                                   | ecn no    | dr  | date       | Dr         | M PESSON                       | 2005-10-11 | ANGULAR        | LINEAR | 0.X   | ±0.3     | size     | A2            | Scale        | 2:1  |   |
| A                                                                                     | S05-0113  | MPE | 2005-10-11 | Chr        | P LEGARE                       | 2005-10-11 | 0"             | ±2"    | 0.XXX | ±0.05    | ECN      | F09-0092      | Rev.         | D    |   |
| B                                                                                     | LS06-0208 | LGO | 2006-12-13 | Appr       |                                |            | Product family |        | -     | Spec ref |          |               |              |      |   |
| C                                                                                     | LS07-0213 | MPE | 2007/11/05 |            |                                |            |                |        |       |          |          |               |              |      |   |
| D                                                                                     | F09-0092  | LSA | 2009/09/16 |            |                                |            |                |        |       |          |          |               |              |      |   |
| -                                                                                     | -         | -   | -          |            |                                |            |                |        |       |          |          |               |              |      |   |
| -                                                                                     | -         | -   | -          |            |                                |            |                |        |       |          |          |               |              |      |   |
| -                                                                                     | -         | -   | -          |            |                                |            |                |        |       |          |          |               |              |      |   |
|  |           |     |            | title      | SUB MALE DW US foot print      |            |                |        |       |          | eng no   | C01-8639-2313 |              | Rev. | D |
|                                                                                       |           |     |            | catalog no | full power right angled solder |            |                |        |       |          | CUSTOMER |               | sheet 1 of 5 |      |   |

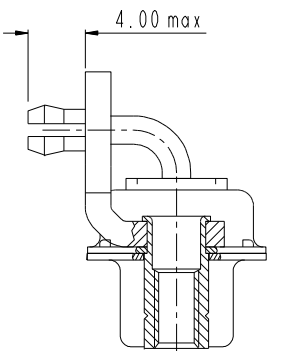
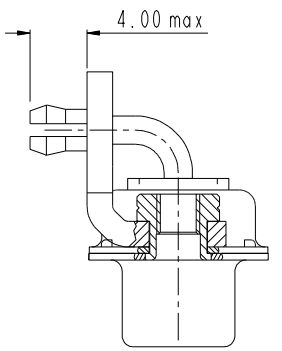
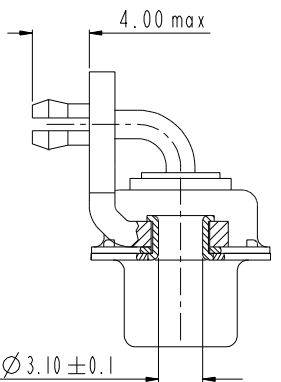
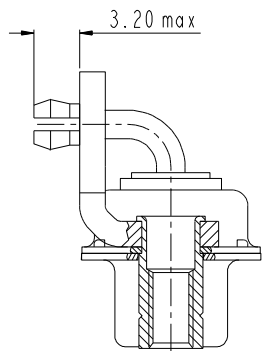
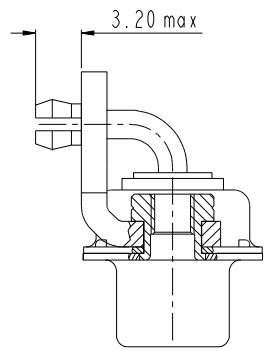
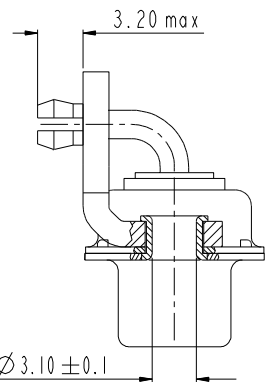


SUB MALE DW US foot print  
full power right angled solder

Customer  
C01-8639-2313



|                 |                      |                                                |                          |                         |                                                |                          |
|-----------------|----------------------|------------------------------------------------|--------------------------|-------------------------|------------------------------------------------|--------------------------|
| FRONT ACCESSORY | <b>Blank</b> Without | <b>L</b> insert M3<br><b>O</b> insert UNC 4.40 | <b>V</b> insert UNC 4.40 | <b>Blank</b> Without    | <b>L</b> insert M3<br><b>O</b> insert UNC 4.40 | <b>V</b> insert UNC 4.40 |
| PCB ACCESSORIES | <b>A</b> Without     | <b>A</b> Without                               | <b>A</b> Without         | <b>M</b> Metal brackets | <b>M</b> Metal brackets                        | <b>M</b> Metal bracket   |



|                 |                                                   |                                                   |                                                   |                                                   |                                                   |                                                   |
|-----------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| FRONT ACCESSORY | <b>Blank</b> Without                              | <b>L</b> insert M3<br><b>O</b> insert UNC 4.40    | <b>V</b> insert UNC 4.40                          | <b>Blank</b> Without                              | <b>L</b> insert M3<br><b>O</b> insert UNC 4.40    | <b>V</b> insert UNC 4.40                          |
| PCB ACCESSORIES | <b>G</b> Metal brackets + harpoons for PCB 1.60mm | <b>G</b> Metal brackets + harpoons for PCB 1.60mm | <b>G</b> Metal brackets + harpoons for PCB 1.60mm | <b>H</b> Metal brackets + harpoons for PCB 2.40mm | <b>H</b> Metal brackets + harpoons for PCB 2.40mm | <b>H</b> Metal brackets + harpoons for PCB 2.40mm |

SCALE:4

|                                       |          |                     |                                   |                  |
|---------------------------------------|----------|---------------------|-----------------------------------|------------------|
| www.fciconnect.com                    |          | surface<br>ISO 1302 | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm |
| TOLERANCES UNLESS OTHERWISE SPECIFIED |          |                     |                                   |                  |
| Dr                                    | M PESSON | 2005-10-11          | size                              | A2               |
| Eng                                   | P LEGARE | 2005-10-11          | scale                             | 2:1              |
| Chr                                   |          |                     | ECN                               | F09-0092         |
| Appr                                  |          |                     | Spec ref                          |                  |

|     |                                |        |               |      |
|-----|--------------------------------|--------|---------------|------|
| FCI | SUB MALE DW US foot print      | ang no | C01-8639-2313 | Rev. |
|     | full power right angled solder |        |               | D    |

| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES               |
|-----------------|------|-----------------------|-----------------------|----------------------------------|
| D*xWxP700A30LF  | 30   | 200                   | without               | without                          |
| D*LxWxP700A30LF | 30   | 200                   | insert M3             | without                          |
| D*OxWxP700A30LF | 30   | 200                   | insert UNC 4.40       | without                          |
| D*VxWxP700A30LF | 30   | 200                   | female screw UNC 4.40 | without                          |
| D*xWxP700H30LF  | 30   | 200                   | without               | metal bracket+harpoon PCB 2.40mm |
| D*LxWxP700H30LF | 30   | 200                   | insert M3             | metal bracket+harpoon PCB 2.40mm |
| D*OxWxP700H30LF | 30   | 200                   | insert UNC 4.40       | metal bracket+harpoon PCB 2.40mm |
| D*VxWxP700H30LF | 30   | 200                   | female screw UNC 4.40 | metal bracket+harpoon PCB 2.40mm |
| D*xWxP700G30LF  | 30   | 200                   | without               | metal bracket+harpoon PCB 1.60mm |
| D*LxWxP700G30LF | 30   | 200                   | insert M3             | metal bracket+harpoon PCB 1.60mm |
| D*OxWxP700G30LF | 30   | 200                   | insert UNC 4.40       | metal bracket+harpoon PCB 1.60mm |
| D*VxWxP700G30LF | 30   | 200                   | female screw UNC 4.40 | metal bracket+harpoon PCB 1.60mm |
| D*xWxP700M30LF  | 30   | 200                   | without               | metal bracket                    |
| D*LxWxP700M30LF | 30   | 200                   | insert M3             | metal bracket                    |
| D*OxWxP700M30LF | 30   | 200                   | insert UNC 4.40       | metal bracket                    |
| D*VxWxP700M30LF | 30   | 200                   | female screw UNC 4.40 | metal bracket                    |

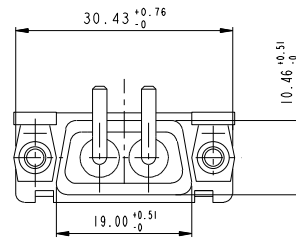
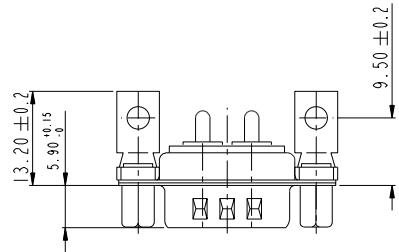
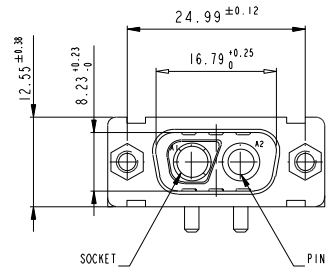
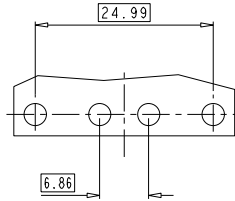
shell size \* LAYOUTS  
xWx

E 2V2  
A 3V3  
A 3W3  
B 5W5  
C 8W8

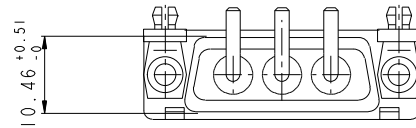
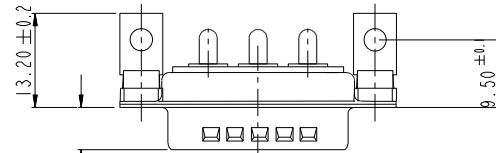
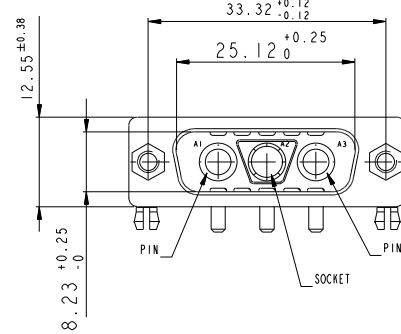
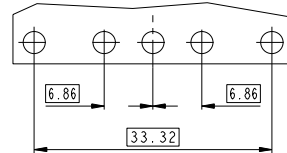
| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES               |
|-----------------|------|-----------------------|-----------------------|----------------------------------|
| D*xWxP743A30LF  | 30   | 500                   | without               | without                          |
| D*LxWxP743A30LF | 30   | 500                   | insert M3             | without                          |
| D*OxWxP743A30LF | 30   | 500                   | insert UNC 4.40       | without                          |
| D*VxWxP743A30LF | 30   | 500                   | female screw UNC 4.40 | without                          |
| D*xWxP743H30LF  | 30   | 500                   | without               | metal bracket+harpoon PCB 2.40mm |
| D*LxWxP743H30LF | 30   | 500                   | insert M3             | metal bracket+harpoon PCB 2.40mm |
| D*OxWxP743H30LF | 30   | 500                   | insert UNC 4.40       | metal bracket+harpoon PCB 2.40mm |
| D*VxWxP743H30LF | 30   | 500                   | female screw UNC 4.40 | metal bracket+harpoon PCB 2.40mm |
| D*xWxP743G30LF  | 30   | 500                   | without               | metal bracket+harpoon PCB 1.60mm |
| D*LxWxP743G30LF | 30   | 500                   | insert M3             | metal bracket+harpoon PCB 1.60mm |
| D*OxWxP743G30LF | 30   | 500                   | insert UNC 4.40       | metal bracket+harpoon PCB 1.60mm |
| D*VxWxP543G30LF | 30   | 500                   | female screw UNC 4.40 | metal bracket+harpoon PCB 1.60mm |
| D*xWxP743M30LF  | 30   | 500                   | without               | metal bracket                    |
| D*LxWxP743M30LF | 30   | 500                   | insert M3             | metal bracket                    |
| D*OxWxP743M30LF | 30   | 500                   | insert UNC 4.40       | metal bracket                    |
| D*VxWxP743M30LF | 30   | 500                   | female screw UNC 4.40 | metal bracket                    |

|                    |          |                                       |                                   |                  |
|--------------------|----------|---------------------------------------|-----------------------------------|------------------|
| www.fciconnect.com |          | surface<br>ISO 1302                   | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                                   |                  |
| Dr                 | M PESSON | 2005-10-11                            | ANGULAR                           | size A2          |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR                            | Scale 2:1        |
| Chr                |          |                                       | 0° ±2°                            | ECN F09-0092     |
| Appr               |          |                                       | Product family                    | Spec ref         |
| FCI                |          | SUB MALE DW US foot print             |                                   | Rev. D           |
|                    |          | full power right angled solder        |                                   |                  |
|                    |          | CUSTOMER                              |                                   | Sheet 3 of 5     |

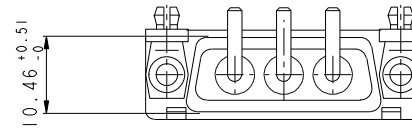
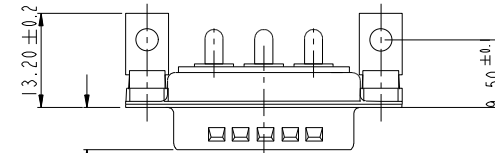
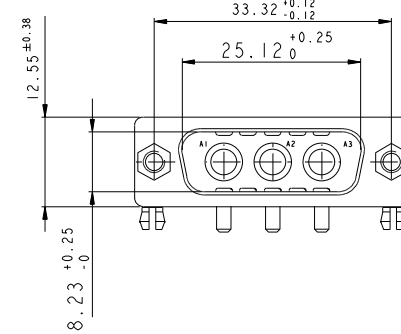
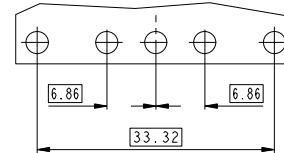
2V2

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1

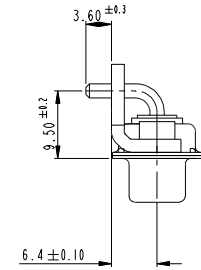
3V3

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1

3W3

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1

SIDE VIEW FOR ALL LAYOUTS



|                    |          |                                       |                                   |                  |          |
|--------------------|----------|---------------------------------------|-----------------------------------|------------------|----------|
| www.fciconnect.com |          | surface<br>ISO 1302                   | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm | mm       |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                                   | size<br>A2       |          |
| Dr                 | M PESSON | 2005-10-11                            | ANGULAR                           | 0.X              | ±0.3     |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR                            | 0.XX             | ±0.1     |
| Chr                |          |                                       | 0° ±2°                            | 0.XXX            | ±0.05    |
| Appr               |          |                                       | Product family                    | ECN              | F09-0092 |
|                    |          |                                       |                                   | Spec ref         |          |

|                                |  |               |  |      |
|--------------------------------|--|---------------|--|------|
| SUB MALE DW US foot print      |  | C01-8639-2313 |  | Rev. |
| full power right angled solder |  | CUSTOMER      |  | D    |

A

B

C

D

E

F

1

2

3

4

5

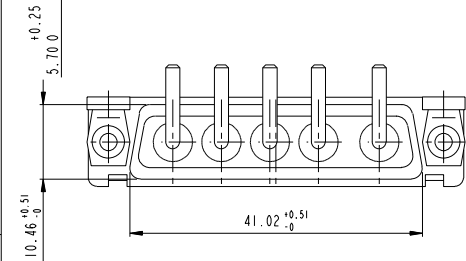
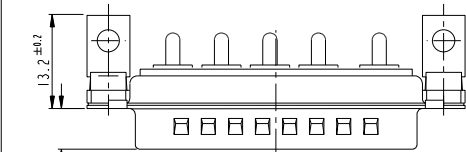
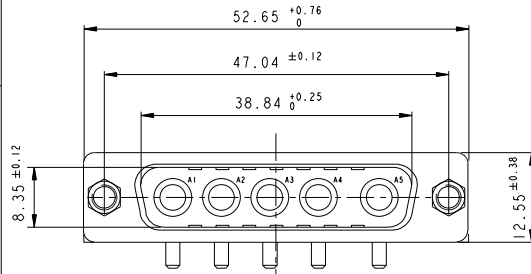
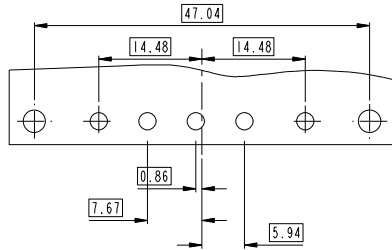
6

7

8

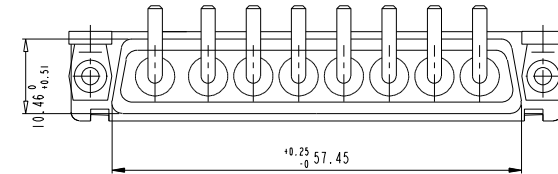
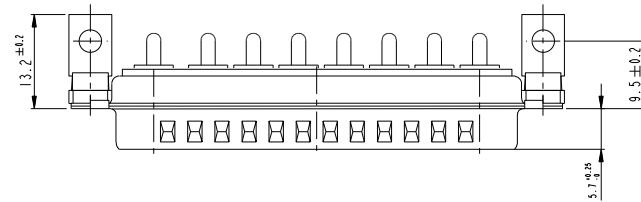
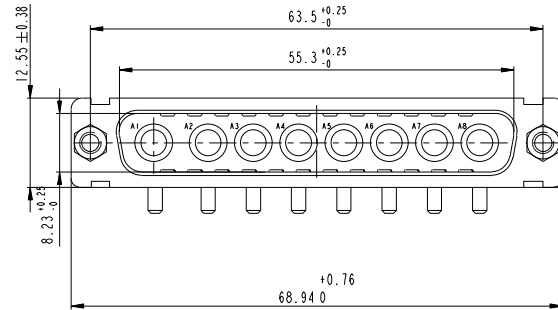
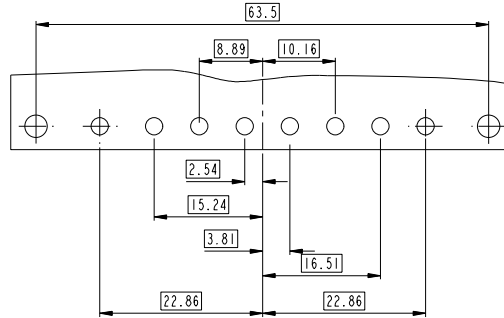
5W5

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see Table I sheet I



8W8

LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see Table I sheet I



1

2

3

4

5

6

7

8

A

B

C

D

E

F

|                    |          |            |                                       |                                   |                  |    |           |
|--------------------|----------|------------|---------------------------------------|-----------------------------------|------------------|----|-----------|
| www.fciconnect.com |          |            | surface<br>ISO 1302                   | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm | mm |           |
|                    |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED |                                   |                  |    |           |
| Dr                 | M PESSON | 2005-10-11 | ANGULAR                               | 0.X ±0.3                          | size             | A2 | Scale 2:1 |
| Eng                | P LEGARE | 2005-10-11 | LINEAR                                | 0.XX ±0.1                         | ECN F09-0092     |    |           |
| Chr                |          |            | 0° ±2°                                | 0.XXX ±0.05                       | Spec ref         |    |           |
| Appr               |          |            | Product family                        |                                   |                  |    |           |

|            |  |                                |  |                       |  |      |  |
|------------|--|--------------------------------|--|-----------------------|--|------|--|
| Title      |  | SUB MALE DW US foot print      |  | Customer              |  | Rev. |  |
| Drawing no |  | C01-8639-2313                  |  | Sheet 5 of 5          |  | D    |  |
| Material   |  | full power right angled solder |  | Printed: Apr 28, 2015 |  |      |  |