

# DBL5W5S300G30LF

## 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 or 40A

-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

Series

Shell size: **E A B C**

see sheet 2

Front accessory definition  
see sheet 2

**L** : threaded insert M3

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

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

Layout of contacts (see sheet 3)

Contacts

**S** : Socket

Termination type

**3** Straight version

Plating

**00** 200 matings/unmatings

**43** 500 matings/unmatings

PCB accessories definition  
see sheet 2

**H** : harpoons for PCB 2.40mm

**G** : harpoons for PCB 1.60mm

Power contacts

**00** : Not fitted with power contact (signal contacts always fitted)

**30** : Fitted with power contacts 30 Amp.

**40** : Fitted with power contacts 40 Amp.

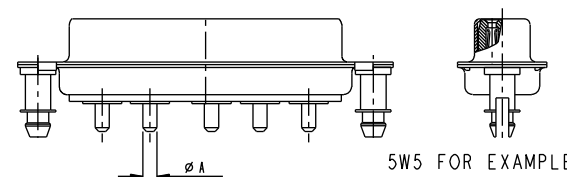
See note RoHS

## 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 + 3 to 10µm Sn(pure bright)
- Accessories: Sn pure bright
- Packaging spec: See GS-14-920

TABLE 1:PCB HOLE DIAMETERS

| POWER CONTACTS    |              |                    | ACCESSORIES        |
|-------------------|--------------|--------------------|--------------------|
| 30 A              | 2.00         | ø2.40              | ø3.10              |
| 40 A              | 2.80         | 3.10               |                    |
| Max current power | øA +0.1<br>0 | PCB HOLE<br>+/-0.1 | PCB HOLE<br>+/-0.1 |



|                    |          |                                       |                  |            |              |
|--------------------|----------|---------------------------------------|------------------|------------|--------------|
| www.fciconnect.com |          | surface                               | tolerance std    | projection | mm           |
|                    |          | ISO 1302                              | ISO 406 ISO 1101 | mm         |              |
|                    |          | 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° ±2°     | 0.XXX ±0.05  |
| Appr               |          |                                       | Product family   |            | ECN F09-0092 |
|                    |          |                                       |                  | size       | A2           |
|                    |          |                                       |                  | Scale      | 2:1          |
|                    |          |                                       |                  | Spec ref   |              |
|                    |          |                                       |                  | Rev.       | F            |

|     |           |     |            |       |     |           |        |          |              |
|-----|-----------|-----|------------|-------|-----|-----------|--------|----------|--------------|
| rev | ecn no    | dr  | date       | title | sub | female dw | ang no | customer | sheet 1 of 4 |
| A   | LS05-0113 | MPE | 2005-10-11 |       |     |           |        |          |              |
| B   | LS06-0208 | LGO | 2006-12-13 |       |     |           |        |          |              |
| C   | LS07-0165 | MPE | 2007/06/14 |       |     |           |        |          |              |
| D   | LS07-0213 | MPE | 2007/11/05 |       |     |           |        |          |              |
| E   | LS09-0027 | MPE | 2009/01/21 |       |     |           |        |          |              |
| F   | F09-0092  | LSA | 2009/09/16 |       |     |           |        |          |              |



|                 |                                                |                                 |                                                |                                 |
|-----------------|------------------------------------------------|---------------------------------|------------------------------------------------|---------------------------------|
| FRONT ACCESSORY | <b>L</b> insert M3<br><b>O</b> insert UNC 4.40 | <b>V</b> insert UNC 4.40        | <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> Harpoon for PCB 1.60mm                | <b>G</b> Harpoon for PCB 1.60mm | <b>H</b> Harpoon for PCB 2.40mm                | <b>H</b> Harpoon for PCB 2.40mm |

| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES |
|-----------------|------|-----------------------|-----------------------|--------------------|
| D*LxWxS300G30LF | 30   | 200                   | insert M3             | harpoon PCB 1.60mm |
| D*OxWxS300G30LF | 30   | 200                   | insert UNC 4.40       | harpoon PCB 1.60mm |
| D*VxWxS300G30LF | 30   | 200                   | female screw UNC 4.40 | harpoon PCB 1.60mm |
| D*LxWxS300H30LF | 30   | 200                   | insert M3             | harpoon PCB 2.40mm |
| D*OxWxS300H30LF | 30   | 200                   | insert UNC 4.40       | harpoon PCB 2.40mm |
| D*VxWxS300H30LF | 30   | 200                   | female screw UNC 4.40 | harpoon PCB 2.40mm |
| D*LxWxS300G40LF | 40   | 200                   | insert M3             | harpoon PCB 1.60mm |
| D*OxWxS300G40LF | 40   | 200                   | insert UNC 4.40       | harpoon PCB 1.60mm |
| D*VxWxS300G40LF | 40   | 200                   | female screw UNC 4.40 | harpoon PCB 1.60mm |
| D*LxWxS300H40LF | 40   | 200                   | insert M3             | harpoon PCB 2.40mm |
| D*OxWxS300H40LF | 40   | 200                   | insert UNC 4.40       | harpoon PCB 2.40mm |
| D*VxWxS300H40LF | 40   | 200                   | female screw UNC 4.40 | harpoon PCB 2.40mm |

shell size LAYOUTS

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

| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES |
|-----------------|------|-----------------------|-----------------------|--------------------|
| D*LxWxS343G30LF | 30   | 500                   | insert M3             | harpoon PCB 1.60mm |
| D*OxWxS343G30LF | 30   | 500                   | insert UNC 4.40       | harpoon PCB 1.60mm |
| D*VxWxS343G30LF | 30   | 500                   | female screw UNC 4.40 | harpoon PCB 1.60mm |
| D*LxWxS343H30LF | 30   | 500                   | insert M3             | harpoon PCB 2.40mm |
| D*OxWxS343H30LF | 30   | 500                   | insert UNC 4.40       | harpoon PCB 2.40mm |
| D*VxWxS343H30LF | 30   | 500                   | female screw UNC 4.40 | harpoon PCB 2.40mm |
| D*LxWxS343G40LF | 40   | 500                   | insert M3             | harpoon PCB 1.60mm |
| D*OxWxS343G40LF | 40   | 500                   | insert UNC 4.40       | harpoon PCB 1.60mm |
| D*VxWxS343G40LF | 40   | 500                   | female screw UNC 4.40 | harpoon PCB 1.60mm |
| D*LxWxS343H40LF | 40   | 500                   | insert M3             | harpoon PCB 2.40mm |
| D*OxWxS343H40LF | 40   | 500                   | insert UNC 4.40       | harpoon PCB 2.40mm |
| D*VxWxS343H40LF | 40   | 500                   | female screw UNC 4.40 | harpoon PCB 2.40mm |

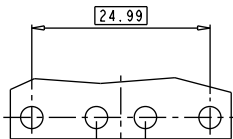
SCALE: 4

|                    |          |                                       |                                   |                  |
|--------------------|----------|---------------------------------------|-----------------------------------|------------------|
| 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                            | ANGULAR                           | size A2          |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR                            | Scale 2:1        |
| Chr                |          |                                       | 0° ±2°                            | ECN F09-0092     |
| Appr               |          |                                       | Product family                    | Spec ref         |

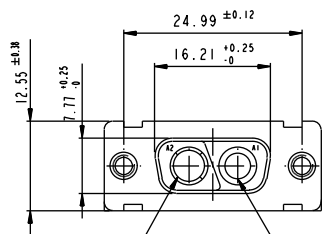
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|-----|----------------------------|----------------------|--------|
| FCI | title SUB FEMALE DW        | eng no C01-8639-2310 | Rev. F |
|     | full power straight solder |                      |        |

PDM Rev F STATUS Released Printed: Jun 20, 2015

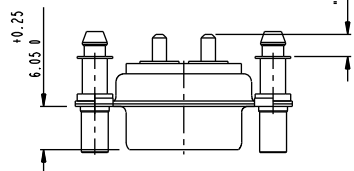
2V2

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

6.86



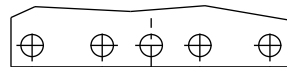
SOCKET PIN



19.00

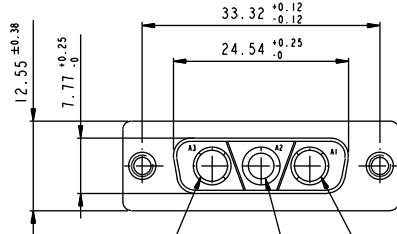
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3V3

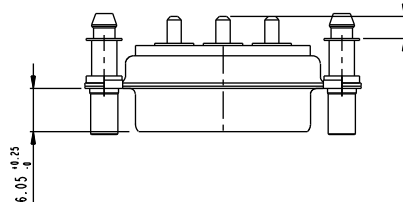
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1

6.86

33.32



SOCKET PIN SOCKET

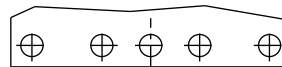


38.76

10.46

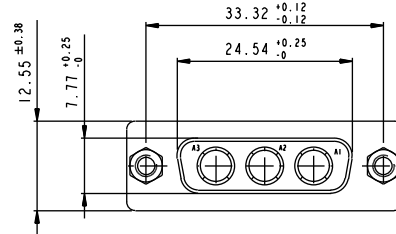
27.25

3W3

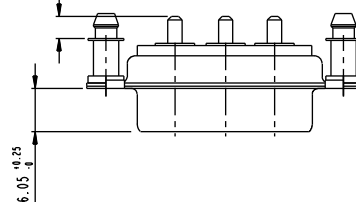
LAYOUT AND CONNECTOR DIMENSIONS  
For PCB hole diameters see table 1 sheet 1

6.86

33.32



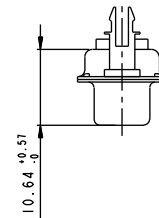
"A" see table



38.76

10.46

27.25

SIDE VIEW FOR  
LAYOUTS: E A B C

10.64

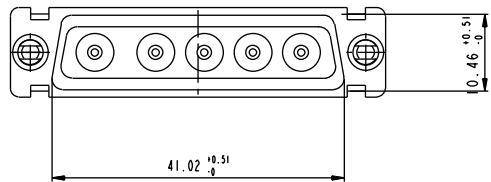
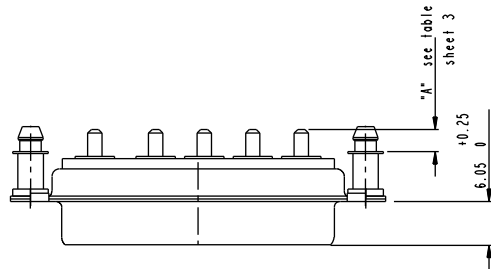
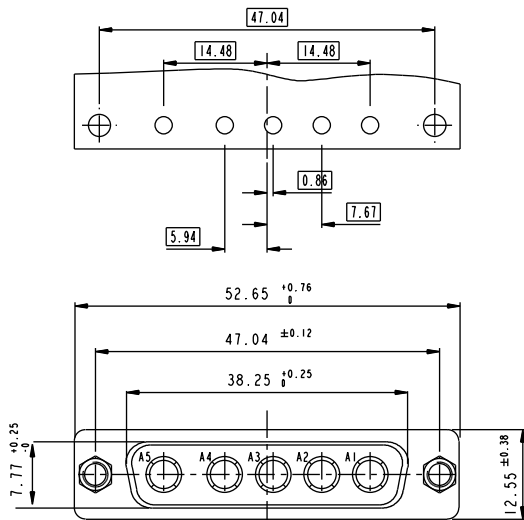
Cote "A"

|     |          |
|-----|----------|
| 30A | 3.1±0.25 |
| 40A | 3.6±0.25 |

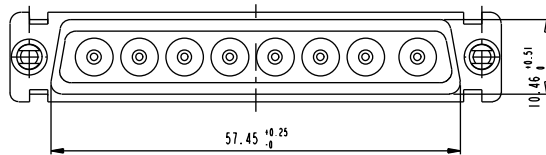
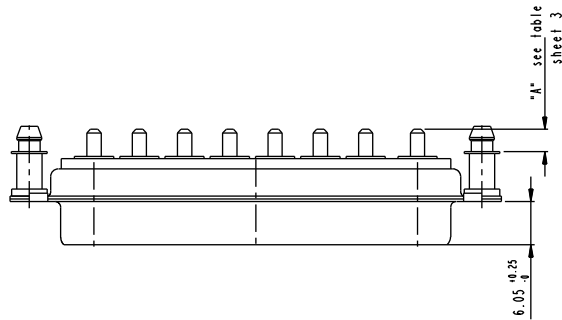
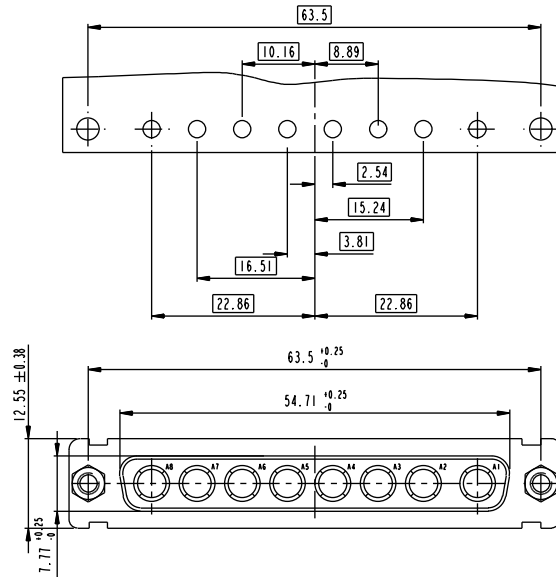
|                                       |          |                     |                                   |                  |
|---------------------------------------|----------|---------------------|-----------------------------------|------------------|
| www.fciconnect.com                    |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

|                            |  |          |               |      |
|----------------------------|--|----------|---------------|------|
| SUB FEMALE DW              |  | deg no   | C01-8639-2310 | Rev. |
| full power straight solder |  | CUSTOMER |               | F    |

# 5W5 LAYOUT AND CONNECTOR DIMENSIONS For PCB hole diameters see table 1 sheet 1



# 8W8 LAYOUT AND CONNECTOR DIMENSIONS For PCB hole diameters see table 1 sheet 1



|                    |          |            |                                       |                                   |                  |          |          |
|--------------------|----------|------------|---------------------------------------|-----------------------------------|------------------|----------|----------|
| www.fciconnect.com |          |            | surface<br>ISO 1302                   | tolerance std<br>ISO 406 ISO 1101 | projection<br>mm | mm       |          |
|                    |          |            | TOLERANCES UNLESS OTHERWISE SPECIFIED |                                   | size             | Scale    |          |
| Dr                 | M PESSON | 2005-10-11 | ANGULAR                               | 0.X                               | ±0.3             | A2       | 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                        |                                   |                  |          |          |

|     |  |  |                            |  |                       |               |      |
|-----|--|--|----------------------------|--|-----------------------|---------------|------|
| FCI |  |  | SUB FEMALE DW              |  | drag no               | C01-8639-2310 | Rev. |
|     |  |  | full power straight solder |  |                       |               |      |
|     |  |  | CUSTOMER                   |  | Printed: Jun 20, 2015 |               |      |