

# DBL5W5P300G30LF

## 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
- I** : female screw M3

Layout of contacts (see sheet 3)

Contacts

**P** : Pin

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.

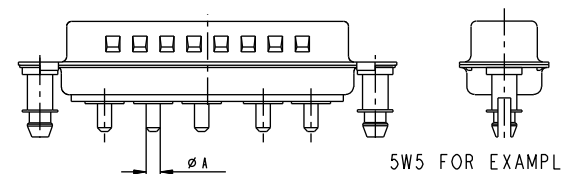
See note RoHS

## 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 +/-0.1 | PCB HOLE +/-0.1 |



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

| rev | ecn no    | dr  | date       | title                      | part no       | Rev. |
|-----|-----------|-----|------------|----------------------------|---------------|------|
| A   | LS05-0113 | MPE | 2005-10-11 | SUB MALE DW                | C01-8639-2314 | G    |
| B   | LS06-0208 | LGO | 2006-12-13 | full power straight solder |               |      |
| C   | LS07-0165 | MPE | 2007/06/14 |                            |               |      |
| D   | LS07-0213 | MPE | 2007/11/05 |                            |               |      |
| E   | LS09-0027 | MPE | 2009/01/21 |                            |               |      |
| F   | F09-0063  | LSA | 2009-07-15 |                            |               |      |
| G   | F09-0092  | LSA | 2009-09-26 |                            |               |      |



|                 |  |  |  |  |
|-----------------|--|--|--|--|
| FRONT ACCESSORY | <b>L</b> insert M3<br><b>O</b> insert UNC 4.40 | <b>V</b> Female screw UNC 4.40<br><b>I</b> Female screw M3 | <b>L</b> insert M3<br><b>O</b> insert UNC 4.40 | <b>V</b> Female screw UNC 4.40<br><b>I</b> Female screw M3 |
| 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*LxWxP300G30LF | 30   | 200                   | insert M3             | harpoon PCB 1.60mm |
| D*OxWxP300G30LF | 30   | 200                   | insert UNC 4.40       | harpoon PCB 1.60mm |
| D*VxWxP300G30LF | 30   | 200                   | female screw UNC 4.40 | harpoon PCB 1.60mm |
| D*IxWxP300G30LF | 30   | 200                   | female screw M3       | harpoon PCB 1.60mm |
| D*LxWxP300H30LF | 30   | 200                   | insert M3             | harpoon PCB 2.40mm |
| D*OxWxP300H30LF | 30   | 200                   | insert UNC 4.40       | harpoon PCB 2.40mm |
| D*VxWxP300H30LF | 30   | 200                   | female screw UNC 4.40 | harpoon PCB 2.40mm |
| D*IxWxP300H30LF | 30   | 200                   | female screw M3       | harpoon PCB 2.40mm |
| D*LxWxP300G40LF | 40   | 200                   | insert M3             | harpoon PCB 1.60mm |
| D*OxWxP300G40LF | 40   | 200                   | insert UNC 4.40       | harpoon PCB 1.60mm |
| D*VxWxP300G40LF | 40   | 200                   | female screw UNC 4.40 | harpoon PCB 1.60mm |
| D*IxWxP300G40LF | 40   | 200                   | female screw M3       | harpoon PCB 1.60mm |
| D*LxWxP300H40LF | 40   | 200                   | insert M3             | harpoon PCB 2.40mm |
| D*OxWxP300H40LF | 40   | 200                   | insert UNC 4.40       | harpoon PCB 2.40mm |
| D*VxWxP300H40LF | 40   | 200                   | female screw UNC 4.40 | harpoon PCB 2.40mm |
| D*IxWxP300H40LF | 40   | 200                   | female screw M3       | 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*LxWxP343G30LF | 30   | 500                   | insert M3             | harpoon PCB 1.60mm |
| D*OxWxP343G30LF | 30   | 500                   | insert UNC 4.40       | harpoon PCB 1.60mm |
| D*VxWxP343G30LF | 30   | 500                   | female screw UNC 4.40 | harpoon PCB 1.60mm |
| D*IxWxP343G30LF | 30   | 500                   | female screw M3       | harpoon PCB 1.60mm |
| D*LxWxP343H30LF | 30   | 500                   | insert M3             | harpoon PCB 2.40mm |
| D*OxWxP343H30LF | 30   | 500                   | insert UNC 4.40       | harpoon PCB 2.40mm |
| D*VxWxP343H30LF | 30   | 500                   | female screw UNC 4.40 | harpoon PCB 2.40mm |
| D*IxWxP343H30LF | 30   | 500                   | female screw M3       | harpoon PCB 2.40mm |
| D*LxWxP343G40LF | 40   | 500                   | insert M3             | harpoon PCB 1.60mm |
| D*OxWxP343G40LF | 40   | 500                   | insert UNC 4.40       | harpoon PCB 1.60mm |
| D*VxWxP343G40LF | 40   | 500                   | female screw UNC 4.40 | harpoon PCB 1.60mm |
| D*IxWxP343G40LF | 40   | 500                   | female screw M3       | harpoon PCB 1.60mm |
| D*LxWxP343H40LF | 40   | 500                   | insert M3             | harpoon PCB 2.40mm |
| D*OxWxP343H40LF | 40   | 500                   | insert UNC 4.40       | harpoon PCB 2.40mm |
| D*VxWxP343H40LF | 40   | 500                   | female screw UNC 4.40 | harpoon PCB 2.40mm |
| D*IxWxP343H40LF | 40   | 500                   | female screw M3       | harpoon PCB 2.40mm |

Copyright FCI.  
**FCI**

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

SCALE: 4

|            |                            |                      |        |
|------------|----------------------------|----------------------|--------|
| <b>FCI</b> | TITLE SUB MALE DW          | eng no C01-8639-2314 | Rev. G |
|            | full power straight solder |                      |        |

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  
LAYOUTS: E A B C



Cote "A"

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

Copyright FCI.  
FCI

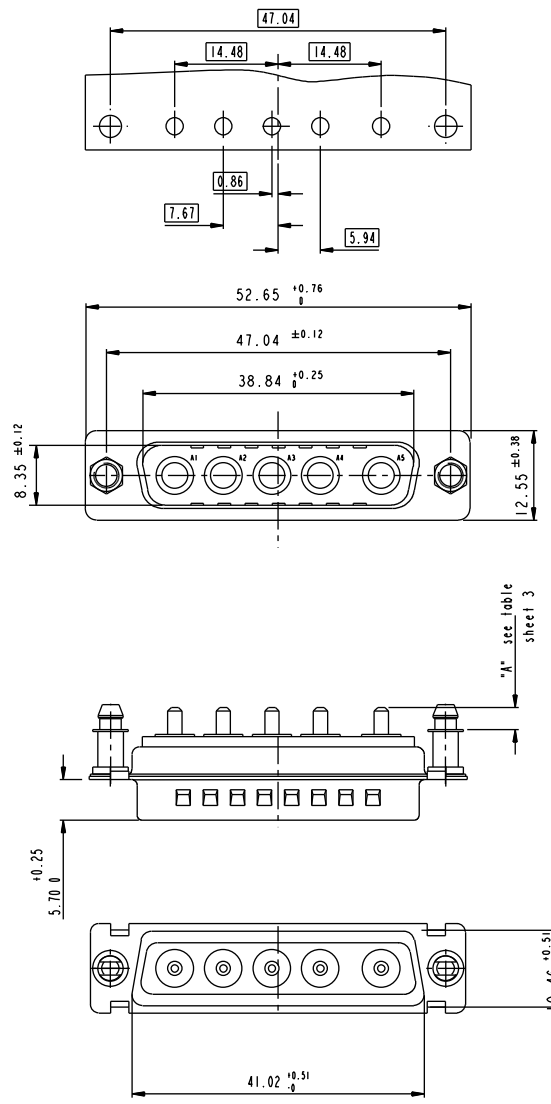
|                                       |          |                       |                                   |              |              |
|---------------------------------------|----------|-----------------------|-----------------------------------|--------------|--------------|
| www.fciconnect.com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

|     |                            |                       |        |
|-----|----------------------------|-----------------------|--------|
| FCI | TITLE SUB MALE DW          | part no C01-8639-2314 | Rev. G |
|     | full power straight solder |                       |        |

### 5W5

LAYOUT AND CONNECTOR DIMENSIONS

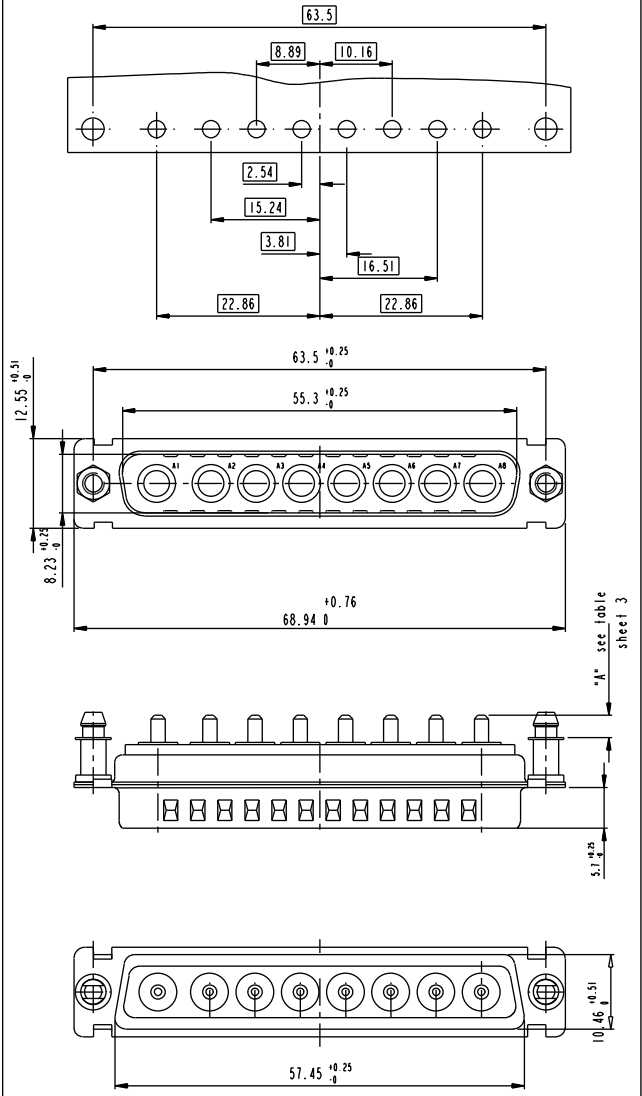
For PCB hole diameters see table 1 sheet 1



### 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 |
| 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         |

|            |  |                          |           |
|------------|--|--------------------------|-----------|
| <b>FCI</b> | TITLE<br>SUB MALE DW<br>full power straight solder | part no<br>C01-8639-2314 | Rev.<br>G |
|------------|--|--------------------------|-----------|