

## 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

## 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 7.5µ(pure bright)
- Active area plating spec:
  - Ni + Gold
- Shell plating :2 to 4µ Cu + 3 to 10µmm Sn(pure bright)
- Accessories: Sn pure bright
- Packaging spec: See GS-14-920

Series

# DBL5W5P300G30LF

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

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    |
|                    |          |                                       |                  | Spec ref   |             |

|     |           |     |            |       |     |         |                            |        |               |      |
|-----|-----------|-----|------------|-------|-----|---------|----------------------------|--------|---------------|------|
| rev | ecn no    | dr  | date       | title | sub | male dw | full power straight solder | ang no | C01-8639-2314 | Rev. |
| 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   | F09-0063  | LSA | 2009-07-15 |       |     |         |                            |        |               |      |
| G   | F09-0092  | LSA | 2009-09-16 |       |     |         |                            |        |               |      |

PDM-Rev:G

STATUS Released

CUSTOMER Printed: Apr 28, 2015



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

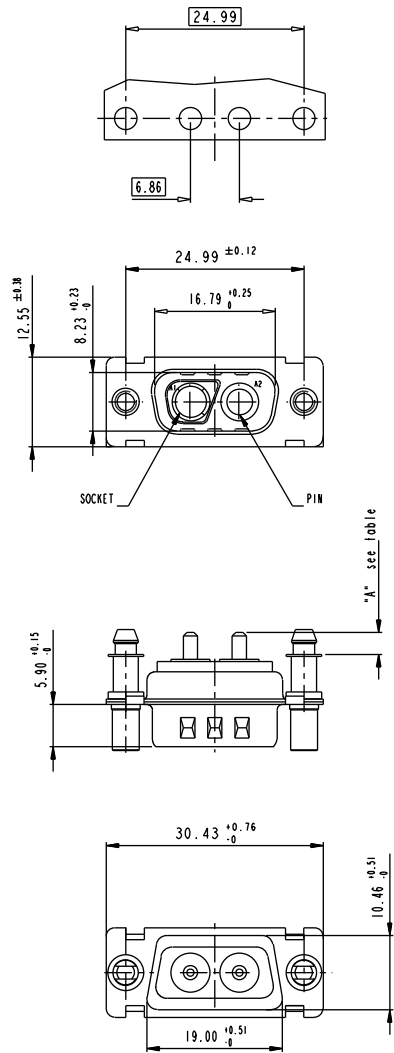
| PART NUMBER     | AMPS | MATINGS/<br>UNMATINGS | FRONT<br>ACCESSORY    | PCB<br>ACCESSORIES |
|-----------------|------|-----------------------|-----------------------|--------------------|
| D*LxWxP343G30LF | 30   | 500                   | insert M3             | harpoon PCB 1.60mm |
| D*OxWxP343G30LF | 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 |

SCALE: 4

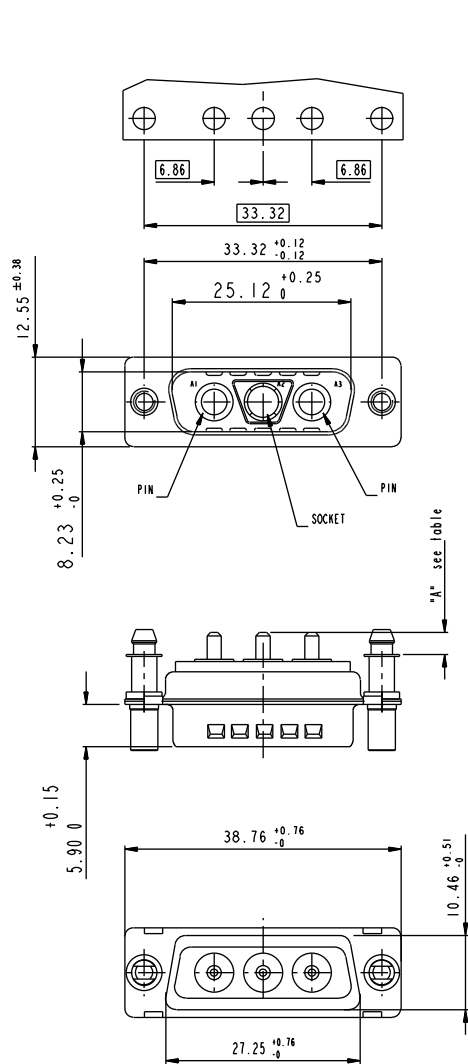
|                    |          |                                       |                                   |             |              |
|--------------------|----------|---------------------------------------|-----------------------------------|-------------|--------------|
| www.fciconnect.com |          | 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 | eng no C01-8639-2314 | Rev. G |
| full power straight solder |  | CUSTOMER          |                      |        |

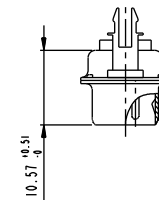
2V2

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 1SIDE VIEW FOR  
LAYOUTS: E A B C

Cote "A"

|     |                |
|-----|----------------|
| 30A | 3.1 $\pm 0.25$ |
| 40A | 3.6 $\pm 0.25$ |

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

|     |             |                            |         |               |      |   |
|-----|-------------|----------------------------|---------|---------------|------|---|
| FCI | title       | SUB MALE DW                | part no | C01-8639-2314 | Rev. | G |
|     | description | 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 | size<br>A2 | Scale<br>2:1    |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                                   |                  |            |                 |
| Dr                 | M PESSON | 2005-10-11                            | ANGULAR                           | 0.X              | ±0.3       | ECN<br>F09-0092 |
| Eng                | P LEGARE | 2005-10-11                            | LINEAR                            | 0.XX             | ±0.1       |                 |
| Chr                |          |                                       | 0° ±2°                            | 0.XXX            | ±0.05      | Spec ref        |
| Appr               |          |                                       | Product family                    |                  |            |                 |

|            |  |                            |                          |           |
|------------|--|----------------------------|--------------------------|-----------|
| FCI        |  | title<br>SUB MALE DW       | part no<br>C01-8639-2314 | Rev.<br>G |
| drawing no |  | full power straight solder |                          |           |
| customer   |  | Printed: Jun 20, 2015      |                          |           |