

## 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 mOhms

-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 10µmm Sn(pure bright)
- Accessories: Sn pure bright + nickel
- Packaging spec: See GS-14-920

# DBL5W5S500G30LF

Series

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

**I** :female screw M3

Layout of contacts (see sheet 3)

Contacts

**S** :Socket

Termination type

**5** Right angle/Europe standard

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

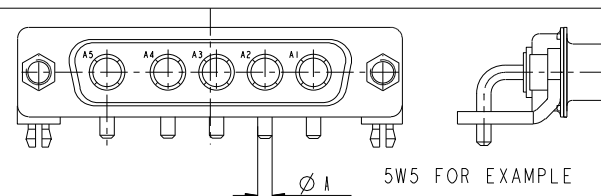
**00** :Not fitted with power contact (signal contacts always fitted)

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

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

TABLE 1:PCB HOLE DIAMETERS

| POWER CONTACTS    |                                 |                            | ACCESSORIES                |
|-------------------|---------------------------------|----------------------------|----------------------------|
| 30 A              | 2.00                            | Ø2.40                      | Ø3.10                      |
| 40 A              | 2.80                            | Ø3.10                      |                            |
| Max current power | ØA <sup>+0.1</sup> <sub>0</sub> | PCB HOLE <sup>+/-0.1</sup> | PCB HOLE <sup>+/-0.1</sup> |



|                    |          |                                       |                  |            |          |
|--------------------|----------|---------------------------------------|------------------|------------|----------|
| 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 |
|                    |          |                                       |                  | size       | A2       |
|                    |          |                                       |                  | Scale      | 2:1      |
|                    |          |                                       |                  | ECN        | F09-0092 |

|     |           |     |            |                                 |                                |        |         |               |       |       |
|-----|-----------|-----|------------|---------------------------------|--------------------------------|--------|---------|---------------|-------|-------|
| rev | ecn no    | dr  | date       | title                           | sub                            | family | product | customer      | sheet | total |
| A   | L505-0113 | MPE | 2005-10-11 | SUB FEMALE DW EUROPE foot print | full power right angled solder |        |         | C01-8639-2308 | 4     | 4     |
| B   | L506-0208 | LGO | 2006-12-13 |                                 |                                |        |         |               |       |       |
| C   | L507-0213 | MPE | 2007-10-31 |                                 |                                |        |         |               |       |       |
| D   | F09-0083  | LSA | 2009-07-15 |                                 |                                |        |         |               |       |       |
| E   | F09-0092  | LSA | 2009-09-16 |                                 |                                |        |         |               |       |       |
| -   | -         | -   | -          |                                 |                                |        |         |               |       |       |
| -   | -         | -   | -          |                                 |                                |        |         |               |       |       |

PDM-REV-E

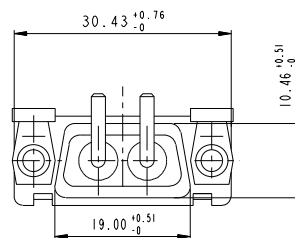
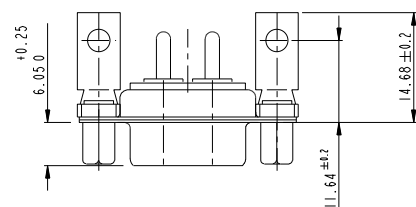
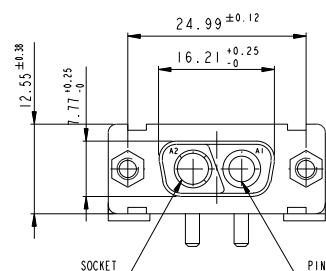
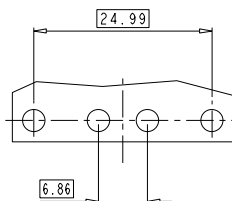
STATUS Released

Printed: Apr 28, 2015



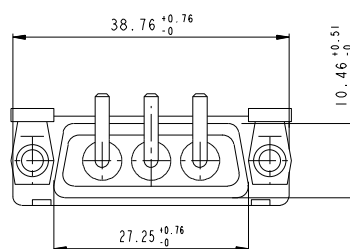
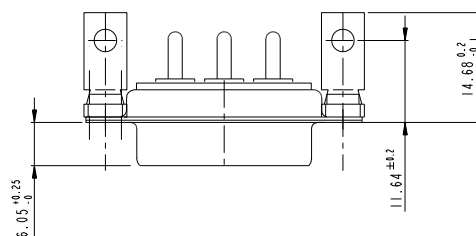
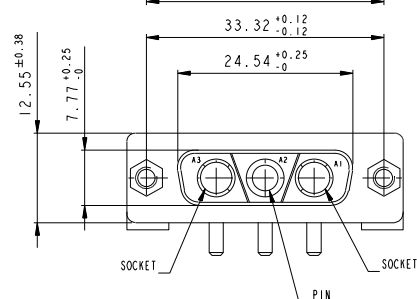
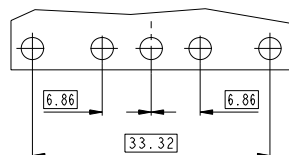
2V2

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

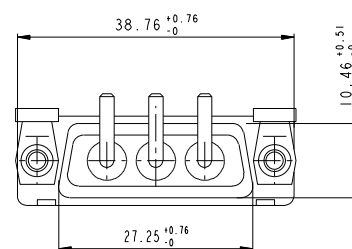
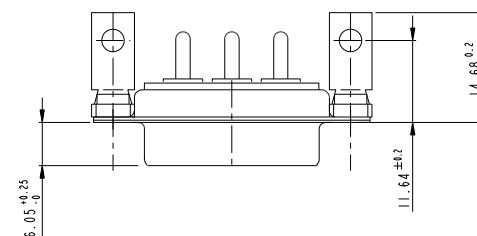
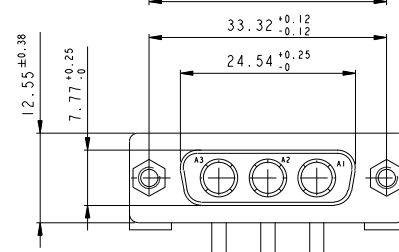
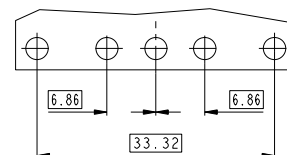


3V3

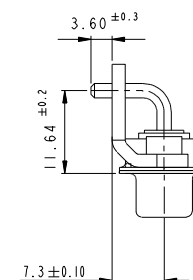
# LAYOUT AND CONNECTOR DIMENSIONS For PCB hole diameters see table 1 sheet 1



3W3



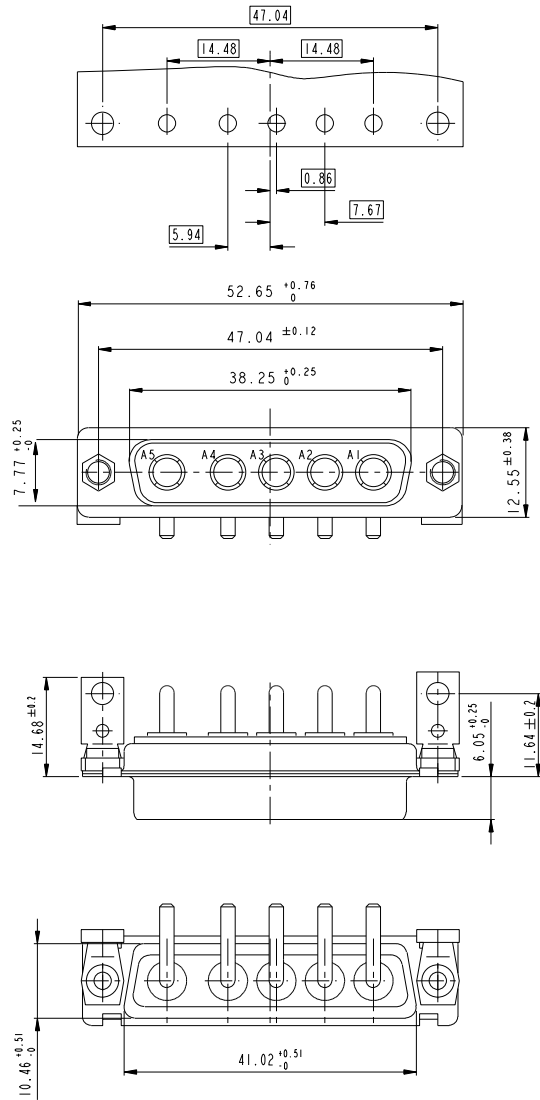
SIDE VIEW FOR ALL LAYOUTS



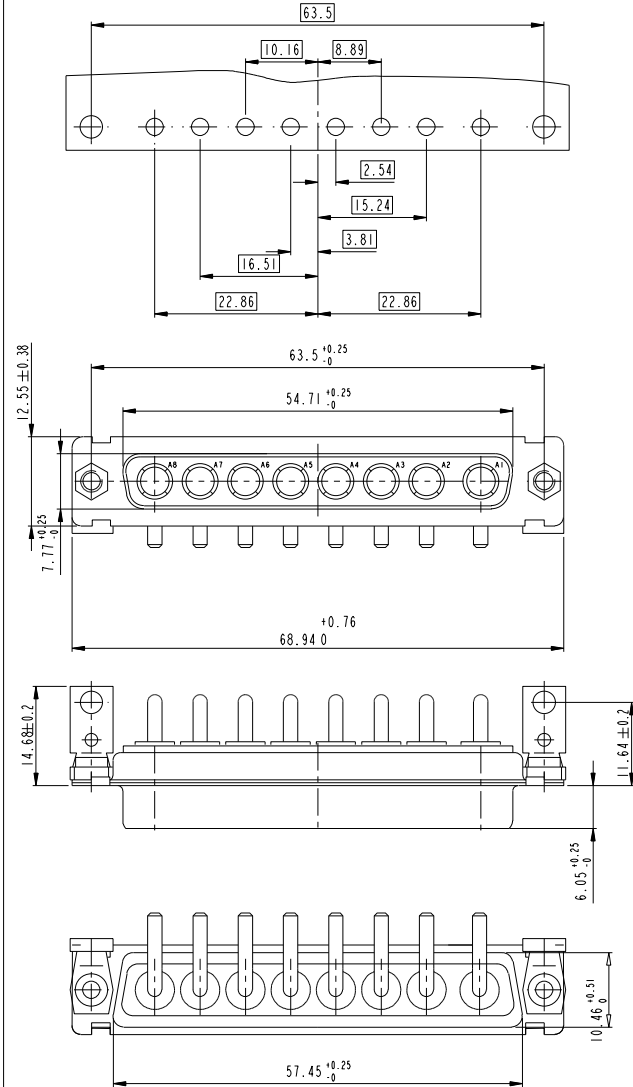
|                    |          |                                       |                                   |                  |       |
|--------------------|----------|---------------------------------------|-----------------------------------|------------------|-------|
| www.fciconnect.com |          | 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                           | 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                    | Spec ref         |       |

|     |  |                                          |                          |              |
|-----|--|------------------------------------------|--------------------------|--------------|
| FCI |  | title<br>SUB FEMALE DW EUROPE foot print | part no<br>C01-8639-2308 | Rev.<br>E    |
|     |  | full power right angled solder           | CUSTOMER                 | Sheet 3 of 4 |

# 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



|                    |          |                                       |                                   |                  |            |                 |
|--------------------|----------|---------------------------------------|-----------------------------------|------------------|------------|-----------------|
| 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 FEMALE DW EUROPE foot print | eng no<br>C01-8639-2308 | Rev.<br>E |
|     |  | full power right angled solder           |                         |           |
|     |  | CUSTOMER                                 |                         |           |