

## 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: 40A

-CONTACT RESISTANCE: <= 7.3 mOhms

-CONTACT/CONTACT : >=1000 V

-CONTACT/GROUND : >=1200 V

-INSULATION RESISTANCE: >=5000 MOhms

- CLIMATIC CATEGORY: 55/125/21

TEMPERATURE RANGE -55°C TO +125°C

DAMP HEAT STEADY STATE 21 DAYS

SALT SPRAY 24 HOURS

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

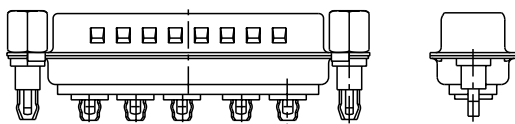
- Female screw : 0.5 N.m minimum

## PRESS FIT PERFORMANCES

| PRESS FIT CONTACTS     |          |
|------------------------|----------|
| INSERTION FORCE        | <= 200 N |
| Average insertion 160N |          |
| EXTRACTION FORCE       | >= 30 N  |

## NOTE RoHS INFORMATION

- The "LF" products meet european union Directives and other country regulations as described in GS-22-008.
- Termination plating spec:
  - Ni 1.27µm+Sn 0.5 to 1.5µm(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



5W5 FOR EXAMPLE

Series

# DBL5W5P93C5G40LF

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

**P** : Pin

Termination type

**93 C** Straight version

Plating

**5** 200 matings/unmatings

**6** 500 matings/unmatings

PCB accessories definition  
see sheet 2

**G** : Harpoon used for PCB thickness from 1.60 mm

Power contacts

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

See note RoHS

TABLE 1:PCB HOLE DIAMETERS

| P.C.B<br>HOLE<br>DEFINITION<br>(NOTE 1 AND 2) | SnPb holes for CONTACTS    |                                 | Sn holes for CONTACTS      |                                 | holes ACCESSORIES |
|-----------------------------------------------|----------------------------|---------------------------------|----------------------------|---------------------------------|-------------------|
|                                               | DRILL DIAMETER             | Ø3.22 REF(NOTE 3)               | DRILL DIAMETER             | Ø3.22 REF(NOTE 3)               |                   |
|                                               | DRILLED HOLE               | Ø3.19-3.25                      | DRILLED HOLE               | Ø3.19-3.25                      |                   |
|                                               | COPPER PLATING             | 25µ MINI (RECOMMENDED 50µ MAXI) | COPPER PLATING             | 25µ MINI (RECOMMENDED 50µ MAXI) |                   |
|                                               | TIN-LEAD PLATING           | 15µ MAXI (RECOMMENDED 5µ MINI)  | TIN-LEAD PLATING           | 15µ MAXI (RECOMMENDED 5µ MINI)  |                   |
|                                               | TIN PLATING                |                                 | TIN PLATING                | 0.8 to 1,2µ                     | Ø3.10±0.10        |
|                                               | FINISH HOLE (AFTER REFLOW) | Ø 3.02-3.20                     | FINISH HOLE (AFTER REFLOW) | Ø3.08-3.20                      |                   |

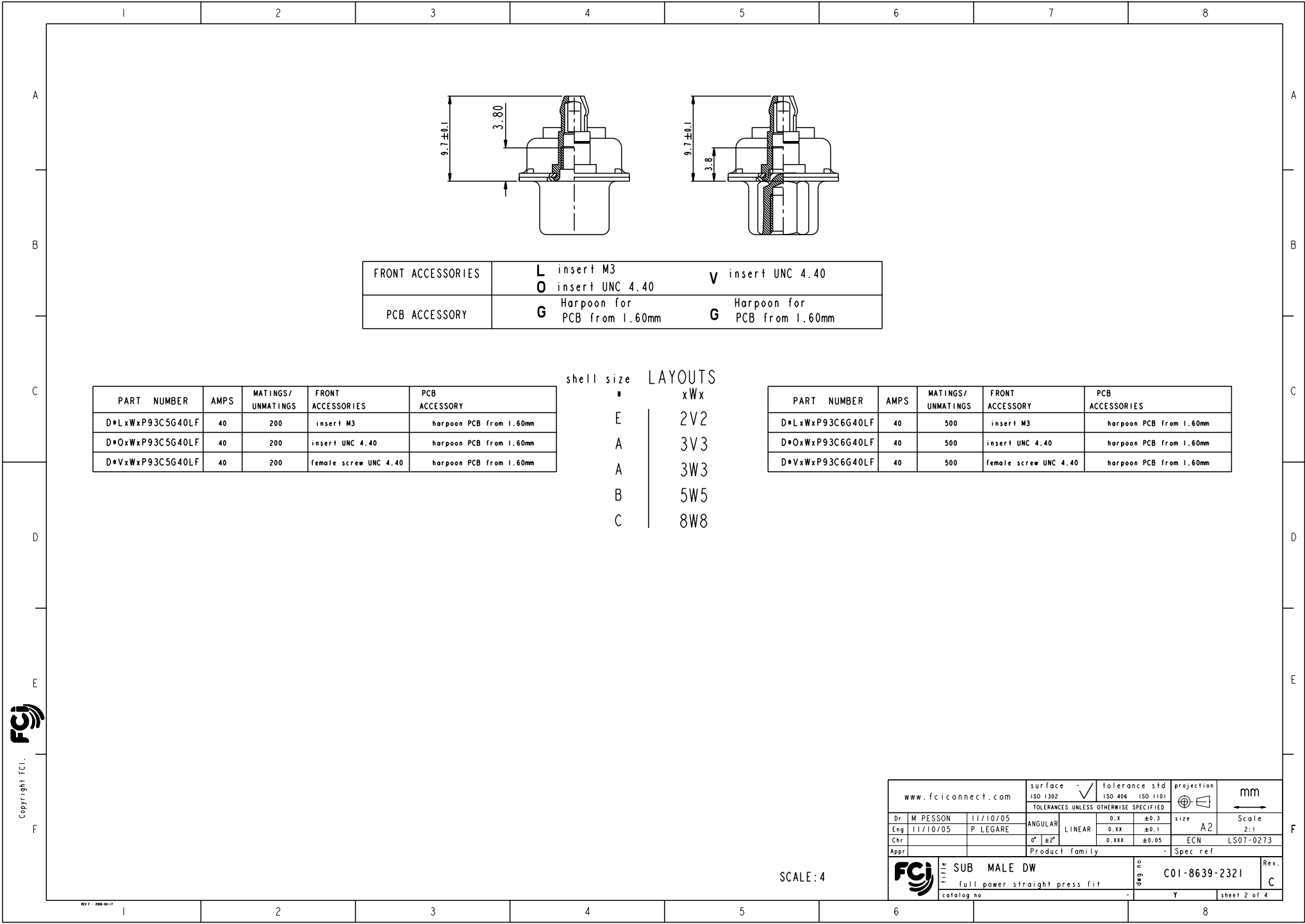
NOTE-1:THESE DIMENSIONS MUST BE RESPECT TO SECURE PRESS-FIT PIN PERFORMANCES.

NOTE-2: ACCORDING TO IEC-352-5 SPEC.

NOTE-3: MAJOR REQUIREMENT FOR PRESS FIT PIN PERFORMANCE

| rev | ecn no    | dr  | date       |
|-----|-----------|-----|------------|
| B   | LS06-0208 | LGO | 2006/12/13 |
| C   | LS07-0273 | MPE | 2007/11/05 |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |
| -   | -         | -   | -          |

|                    |          |                                       |                               |               |            |               |              |       |
|--------------------|----------|---------------------------------------|-------------------------------|---------------|------------|---------------|--------------|-------|
| www.fciconnect.com |          | surface                               | ISO 1302                      | tolerance std | ISO 406    | ISO 1101      | projection   | mm    |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                               |               |            |               |              |       |
| Dr                 | M PESSON | 11/10/05                              | ANGULAR                       | 0.X           | ±0.3       | size          | A2           | Scale |
| Eng                | 11/10/05 | P LEGARE                              | LINEAR                        | 0.XX          | ±0.1       | 2:1           |              |       |
| Chr                |          |                                       | 0° ±2°                        | 0.XXX         | ±0.05      | ECN           | LS07-0273    |       |
| Appr               |          |                                       | Product family                |               | - Spec ref |               |              |       |
| FCI                |          | SUB MALE DW                           | full power straight press fit |               | dag no     | C01-8639-2321 | Rev.         | C     |
|                    |          | catalog no                            |                               |               | Y          |               | sheet 1 of 4 |       |



|                   |                               |                               |
|-------------------|-------------------------------|-------------------------------|
| FRONT ACCESSORIES | L insert M3                   | V insert UNC 4.40             |
|                   | O insert UNC 4.40             |                               |
| PCB ACCESSORY     | G Harpoon for PCB from 1.60mm | G Harpoon for PCB from 1.60mm |

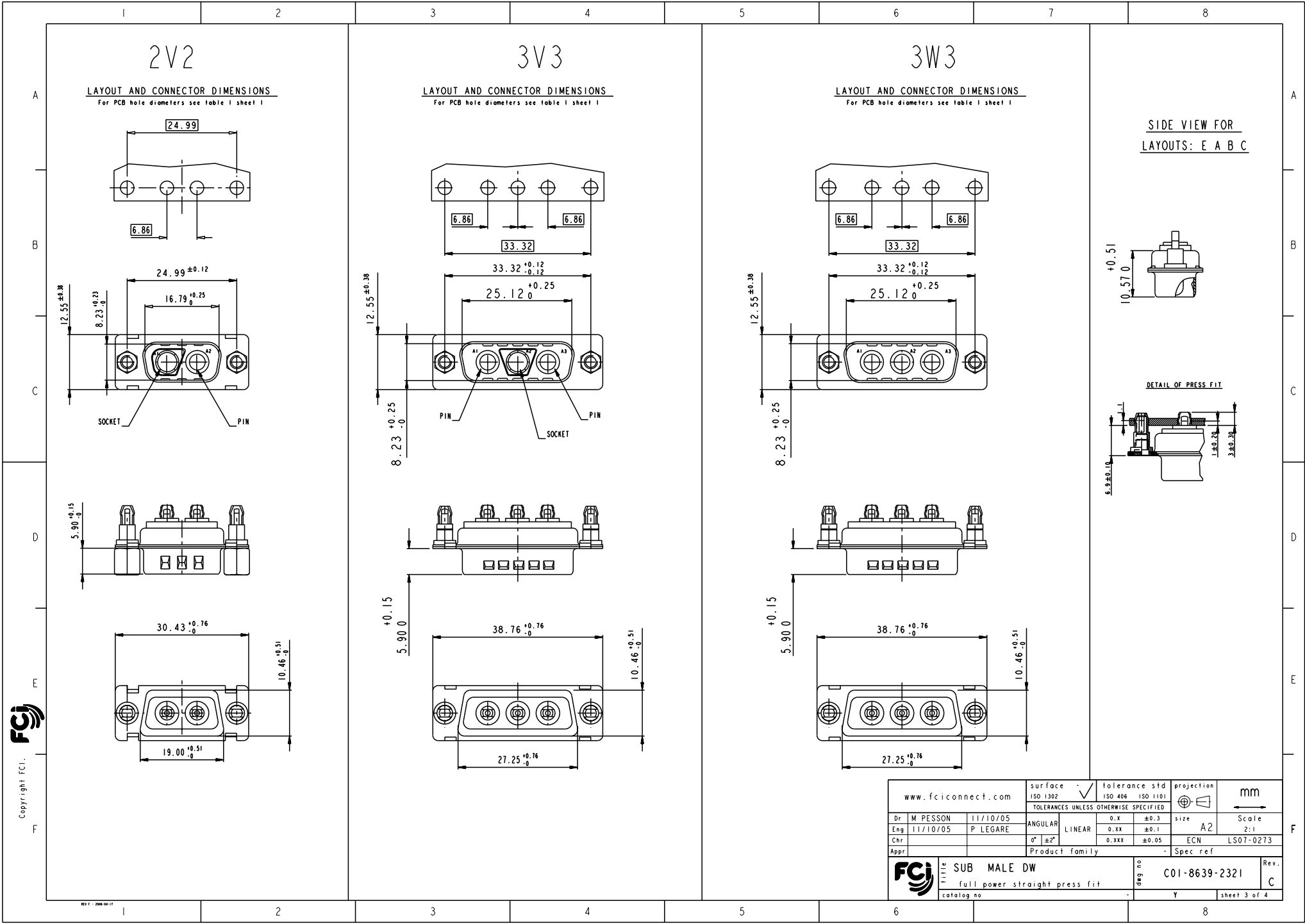
| PART NUMBER      | AMPS | MATINGS/ UNMATINGS | FRONT ACCESSORIES     | PCB ACCESSORY           |
|------------------|------|--------------------|-----------------------|-------------------------|
| D*LxWxP93C5G40LF | 40   | 200                | insert M3             | harpoon PCB from 1.60mm |
| D*OxWxP93C5G40LF | 40   | 200                | insert UNC 4.40       | harpoon PCB from 1.60mm |
| D*VxWxP93C5G40LF | 40   | 200                | female screw UNC 4.40 | harpoon PCB from 1.60mm |

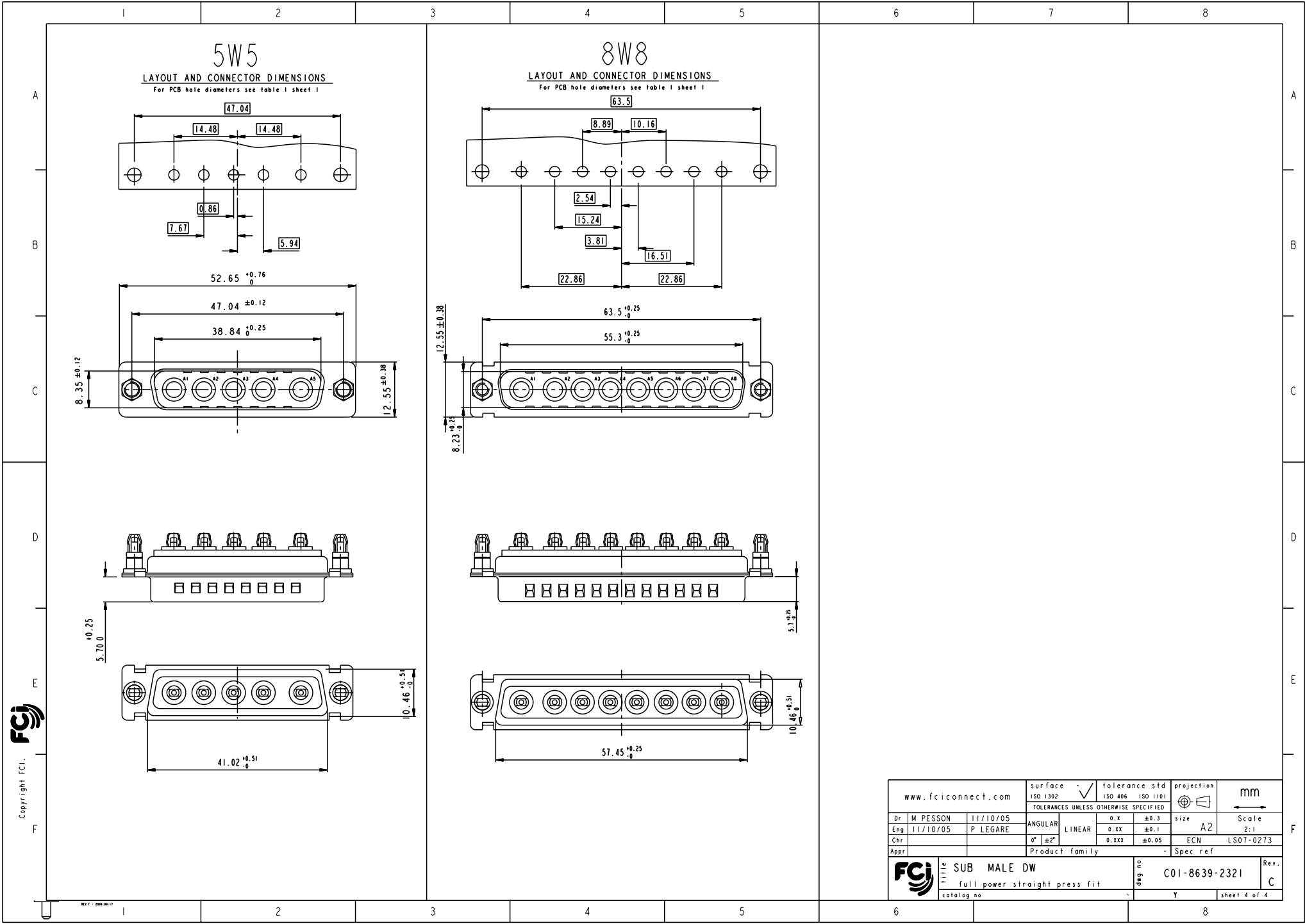
| shell size | LAYOUTS |
|------------|---------|
| #          | xWx     |
| E          | 2V2     |
| A          | 3V3     |
| A          | 3W3     |
| B          | 5W5     |
| C          | 8W8     |

| PART NUMBER      | AMPS | MATINGS/ UNMATINGS | FRONT ACCESSORY       | PCB ACCESSORIES         |
|------------------|------|--------------------|-----------------------|-------------------------|
| D*LxWxP93C6G40LF | 40   | 500                | insert M3             | harpoon PCB from 1.60mm |
| D*OxWxP93C6G40LF | 40   | 500                | insert UNC 4.40       | harpoon PCB from 1.60mm |
| D*VxWxP93C6G40LF | 40   | 500                | female screw UNC 4.40 | harpoon PCB from 1.60mm |

SCALE: 4

|                                                                                       |          |          |                                                                                        |       |               |              |
|---------------------------------------------------------------------------------------|----------|----------|----------------------------------------------------------------------------------------|-------|---------------|--------------|
| www.fciconnect.com                                                                    |          |          | surface <input checked="" type="checkbox"/> tolerance std<br>ISO 1302 ISO 406 ISO 1101 |       | projection    | mm           |
| TOLERANCES UNLESS OTHERWISE SPECIFIED                                                 |          |          |                                                                                        |       |               |              |
| Dr                                                                                    | M PESSON | 11/10/05 | ANGULAR                                                                                | 0.X   | ±0.3          | Scale<br>2:1 |
| Eng                                                                                   | 11/10/05 | P LEGARE | LINEAR                                                                                 | 0.XX  | ±0.1          |              |
| Chr                                                                                   |          |          | 0° ±2°                                                                                 | 0.XXX | ±0.05         |              |
| Appr                                                                                  |          |          | Product family                                                                         |       | ECN           | LS07-0273    |
|                                                                                       |          |          |                                                                                        |       | Spec ref      |              |
|  |          |          | SUB MALE DW                                                                            |       | deg no        | Rev.         |
|                                                                                       |          |          | full power straight press fit                                                          |       | C01-8639-2321 | C            |
| catalog no                                                                            |          |          |                                                                                        |       | Y             | sheet 2 of 4 |





|                    |          |                                       |                |                               |            |               |            |           |
|--------------------|----------|---------------------------------------|----------------|-------------------------------|------------|---------------|------------|-----------|
| www.fciconnect.com |          | surface                               | ISO 1302       | tolerance std                 | ISO 406    | ISO 1101      | projection | mm        |
|                    |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                |                               |            |               | size       | Scale     |
| Dr                 | M PESSON | 11/10/05                              | ANGULAR        | 0.X                           | $\pm 0.3$  |               | A2         | 2:1       |
| Eng                | 11/10/05 | P LEGARE                              | LINEAR         | 0.XX                          | $\pm 0.1$  |               | ECN        | LS07-0273 |
| Chr                |          |                                       | 0° $\pm 2°$    | 0.XXX                         | $\pm 0.05$ |               | Spec ref   |           |
| Appr               |          |                                       | Product family |                               |            |               |            |           |
| FCI                |          | SUB MALE DW                           |                | full power straight press fit |            | C01-8639-2321 |            | Rev. C    |
| catalog no         |          |                                       |                | Y                             |            | sheet 4 of 4  |            |           |