

## REFERENCE SPECIFICATIONS

- DIN 41652
- MIL-DTL-24308

## PHYSICAL CHARACTERISTICS

- INSULATOR MATERIAL:
- PBT COLOR BLACK-RAL 7001/STANDARD MATERIAL
- CONTACT MATERIAL: - PHOSPHOR BRONZE FOR STRAIGHT CONTACT AND RA SOCKET  
- BRASS FOR RA PIN
- GROUNDING DEVICE MATERIAL: - BRASS FOR RIGHT ANGLE CONTACT

## ELECTRICAL CHARACTERISTICS

- MAXIMUM RATING CURRENT: 5A AT 70°C
- NOMINAL CURRENT: 5A (STANDARD CONDITIONS)
- CONTACT RESISTANCE: straight terminations: <10mΩ  
Right angled termination: <25mΩ  
: <35mΩ for 50 way
- VOLTAGE PROOF: >1000 V.r.m.s.
- RATED VOLTAGE: 300 V.r.m.s.
- insulation resistance: >5000mΩ
- creepage and clearance distance: >1mm
- average wiping length: 2mm

## MECHANICAL CHARACTERISTICS

- RETENTION AGAINST TORQUE: - Threaded insert: 0.7 N.m minimum  
- Female screw lock: 0.5 N.m minimum
- INSERTION AND WITH DRAWAL FORCE: <n x 3.40 N (n number of cts)
- GAUGE RETENTION FORCE: >0.20 N (gauge PM)
- THICKNESS GAUGE:  $\varnothing 0.99 \pm 0.005$  / SURFACE ROUGHNESS:  
Ra=0.10μ mini- 0.25μ maxi
- CONTACT RETENTION IN INSULATOR: mini 16N for straight contact  
mini 20N for right angled contact
- VIBRATIONS: 10-2000Hz / 1.5 mm - 20g / 3 x 2 HRS
- INTERRUPTION <1μs (NOT APPLICABLE FOR PL3)
- SHOCK: ACC. HALF SINE 50g- 11m.s-6x3 SHOCKS
- INTERRUPTION <1μs
- HARPOON INSERTION FORCE: <60N

## PERFORMANCE LEVELS

| MECHANICAL ENDURANCE ONLY |                    |     |
|---------------------------|--------------------|-----|
| P/N: DXXXXCXXXXXX         | PERFORMANCE LEVELS |     |
| 4                         | 200 OPERATIONS     | PL3 |
| 6                         | 400 OPERATIONS     | PL1 |

| MECHANICAL ENDURANCE AND INDUSTRIAL ATMOSPHERE TEST(I) |                                         |     |  |
|--------------------------------------------------------|-----------------------------------------|-----|--|
| P/N: DXXXXCXXXXXX                                      | PERFORMANCE LEVELS                      |     |  |
| 4                                                      | salt spray: 24 hours                    | PL3 |  |
| 6                                                      | 250 op + test (1 or 2)-10 days + 250 op | PL1 |  |

1) INDUSTRIAL ATMOSPHERE TEST: 3 GASES available for contacts and grounding device

IN ACCORDANCE WITH IEC-68-2-60-TTD - TEST ke - MTH C OR IEC 512-6 TEST IIg

MIXED GASES: H2S=10 PPB±5.10-9vol/vol +N2O=200±50.10-9 vol/vol + CL2=10±5.10-9vol/vol

TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±3°C

(2) INDUSTRIAL ATMOSPHERE TEST: 4 GASES available for contacts active area only

BELCORE TEST: MIXED GASES: H2S=10 PPB±5 vol/vol +N2O=200ppb±50 vol/vol + CL2

=10ppb±3vol/vol + S2O=100ppb±30vol/vol

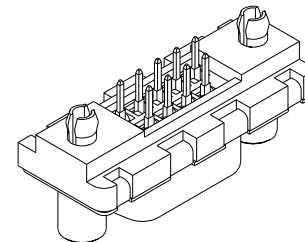
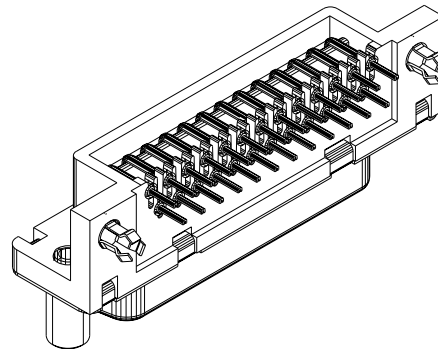
TEMPERATURE = 30±1°C / RELATIVE HUMIDITY= 70±2°C

## ENVIRONMENTAL CHARACTERISTICS

- CLIMATIC CATEGORY: 55/125/56
- TEMPERATURE RANGE -55°C TO +125°C
- DAMP HEAT STEADY STATE 56 DAYS

RIGHT ANGLED

STRAIGHT



## PLATING TIN LEAD VERSION

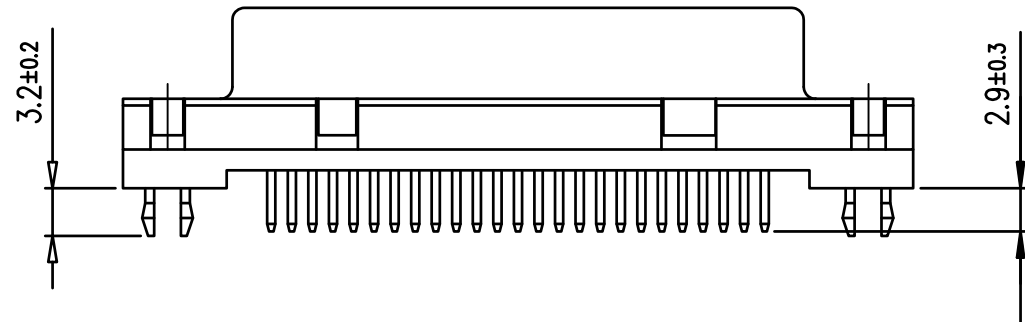
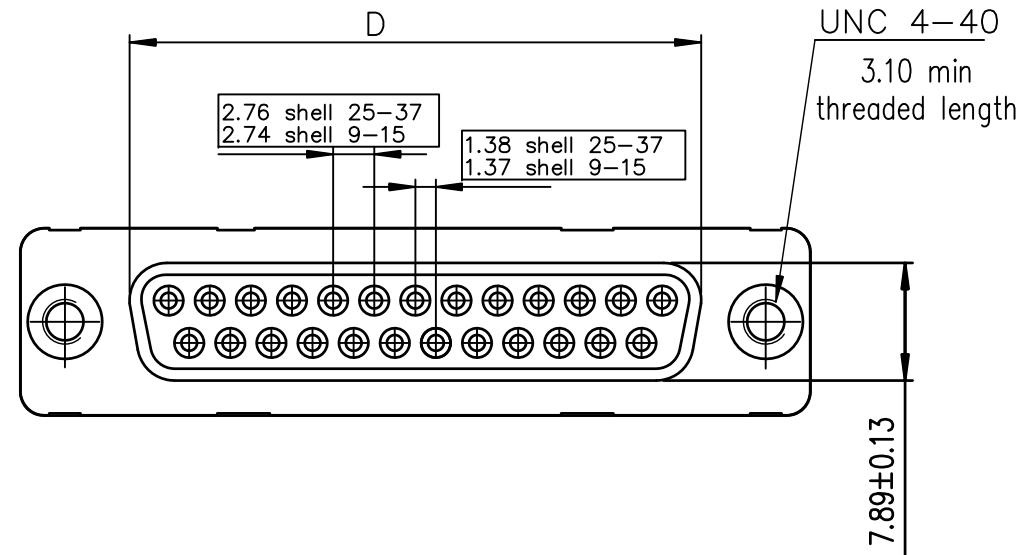
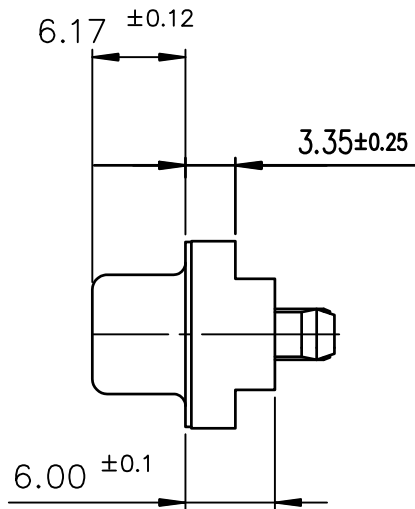
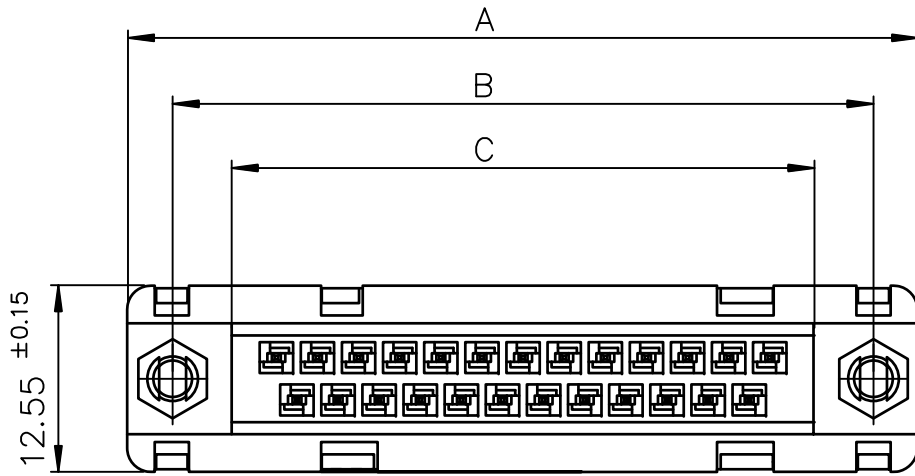
- CONTACT:
  - GOLD OVER NICKEL ON MATING SURFACES
  - TIN LEAD OVER NICKEL ON TERMINATION PARTS
- SHELL AND ACCESSORIES TIN LEAD OVER COPPER

## PLATING TIN VERSION

## NOTE RoHS INFORMATIONS

- 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 1.6 mm minimum thickcircuit board. See application notes/procedures if they are available.
- Termination plating spec: 1.27μm Nickel mini, 2.5 to 7.5 μm Sn (pure matte)
- Shell plating: 2 to 4 μm Cu + 3 to 10 μ Sn (pure bright)
- Accessories: Sn pure bright
- Packaging spec: see GS-14-920

|                                                                                                             |         |          |                                                                                               |  |           |               |                                                                                                  |               |                                                                                       |              |     |
|-------------------------------------------------------------------------------------------------------------|---------|----------|-----------------------------------------------------------------------------------------------|--|-----------|---------------|--------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------|--------------|-----|
| <br>www.fciconnect.com |         |          | surface  |  | tolerance |               | projection  |               |  |              |     |
| Dr                                                                                                          | JOUBERT | 30/11/00 | Product family                                                                                |  |           | -             | size                                                                                             | Scale         |                                                                                       |              |     |
| Eng                                                                                                         |         |          | Spec ref                                                                                      |  |           |               | A3                                                                                               | 1:1           |                                                                                       |              |     |
| Chr                                                                                                         |         |          | Material                                                                                      |  |           | SEE NOTES     | ECN                                                                                              | LS05-0039     |                                                                                       |              |     |
| Appr                                                                                                        | LEGARE  | 30/11/00 |                                                                                               |  |           |               |                                                                                                  |               |                                                                                       |              |     |
| title                                                                                                       |         |          | DELTA D SOLDER CTS CONNECTORS                                                                 |  |           | dwg no        |                                                                                                  | C01-8646-0000 |                                                                                       |              | Rev |
| GENERAL CHARACTERISTICS                                                                                     |         |          |                                                                                               |  |           |               |                                                                                                  |               |                                                                                       |              | C   |
| catalog no                                                                                                  |         |          | -                                                                                             |  |           | CUSTOMER COPY |                                                                                                  |               |                                                                                       | sheet 1 of 1 |     |

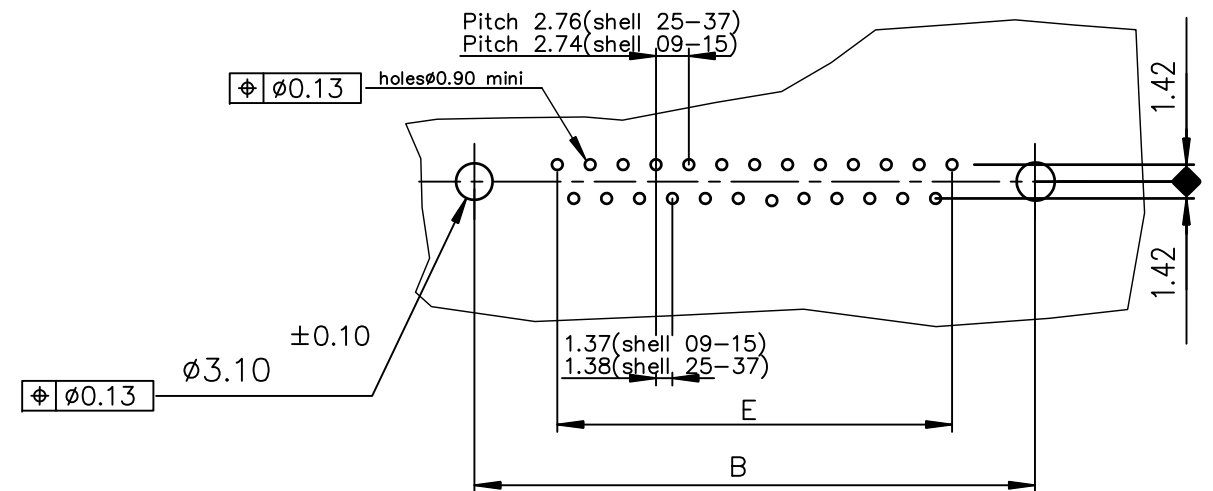


LEAD FREE PART NUMBER

| SHELL | A±0.38 | B±0.12 | C±0.10 | D±0.25 | E±0.07 | PART NUMBER    |
|-------|--------|--------|--------|--------|--------|----------------|
| 09    | 30.81  | 24.99  | 16.96  | 16.21  | 10.96  | D09S24A.GX00LF |
| 15    | 39.14  | 33.32  | 25.18  | 24.54  | 19.18  | D15S24A.GX00LF |
| 25    | 53.03  | 47.04  | 39.12  | 38.25  | 33.12  | D25S24A.GX00LF |
| 37    | 69.32  | 63.50  | 55.68  | 54.71  | 49.68  | D37S24A.GX00LF |

Plating: 4 --> Flash Au  
Plating: 6 --> 0.76μ Au

PC card drilling dimensions(after plating)  
(thickness 1.60±0.20mm)



GENERAL CHARACTERISTICS AND ROHS INFORMATION:  
SEE DRAWING C01-8646-0000

|                  |             |    |            |                                       |                               |                  |                                                   |  |  |  |  |  |  |  |  |  |  |  |
|------------------|-------------|----|------------|---------------------------------------|-------------------------------|------------------|---------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| mat'l. code<br>— |             |    |            | surface<br>ISO 1302 ✓                 | tolerance<br>ISO 406 ISO 1101 | projection<br>MM | product family<br>D-SUB                           |  |  |  |  |  |  |  |  |  |  |  |
| ltr              | ecn no      | dr | date       | tolerances unless otherwise specified |                               | MM               | title<br>FEMALE DELTA-D<br>STRAIGHT , SOLDER TYPE |  |  |  |  |  |  |  |  |  |  |  |
| J                | ELX-I-21654 | AB | 2015-10-26 | angles                                | linear                        |                  |                                                   |  |  |  |  |  |  |  |  |  |  |  |
|                  |             |    |            | 0°±2°                                 |                               |                  |                                                   |  |  |  |  |  |  |  |  |  |  |  |
|                  |             |    |            | dr                                    | JOUBERT                       | 1996-09-10       | <div>FCI</div>                                    |  |  |  |  |  |  |  |  |  |  |  |
|                  |             |    |            | engr                                  | ALIAS BABU                    | 2015-10-26       |                                                   |  |  |  |  |  |  |  |  |  |  |  |
|                  |             |    |            | chr                                   | MITHUN PAUL                   | 2015-10-26       |                                                   |  |  |  |  |  |  |  |  |  |  |  |
|                  |             |    |            | appd                                  | BIJU K PAUL                   | 2015-10-26       |                                                   |  |  |  |  |  |  |  |  |  |  |  |
| sheet index      | revision    | J  |            |                                       |                               |                  |                                                   |  |  |  |  |  |  |  |  |  |  |  |
|                  | sheet       | 1  |            |                                       |                               |                  |                                                   |  |  |  |  |  |  |  |  |  |  |  |