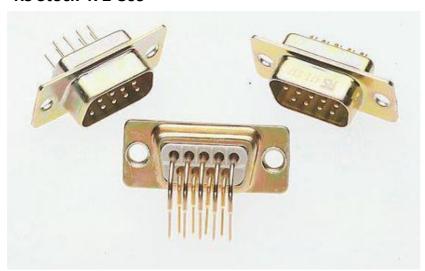




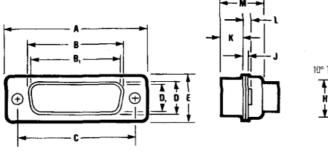
## **Datasheet**

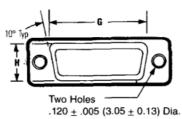
# 37 Way Straight Through Hole Mount PCB D-sub Connector, Socket

RS Stock 472-809



## Dimensions: (mm)





**Mating Side** 

**Termination Side** 

| Shell<br>Size |                  | onnector | A±.015"<br>(0.38mm) |       | B±.010"<br>(0.25mm) |       | B <sub>1</sub> ±.005"<br>(0.13 mm) | C±.005"<br>(0.13mm) |       | D±.010"<br>(0.25mm) | D <sub>1±</sub> .010"<br>(0.25mm) |      | E±.010"<br>(0.25mm) |      |      |       |
|---------------|------------------|----------|---------------------|-------|---------------------|-------|------------------------------------|---------------------|-------|---------------------|-----------------------------------|------|---------------------|------|------|-------|
|               | <b>Positions</b> | Type     | in                  | mm    | in                  | mm    | in                                 | mm                  | in    | mm                  | in                                | mm   | in                  | mm   | in   | mm    |
| E             | 9                | Plug     | 1.213               | 30.81 |                     |       | .666                               | 16.90               | 0.984 | 24.99               |                                   |      | .329                | 8.40 | .494 | 12.55 |
|               |                  | Socket   | 1.213               | 30.81 | .640                | 16.26 |                                    |                     | 0.984 | 24.99               | .308                              | 7.82 |                     |      | .494 | 12.55 |
| Α             | 15               | Plug     | 1.541               | 39.14 |                     |       | .994                               | 25.30               | 1.312 | 33.32               |                                   |      | .329                | 8.40 | .494 | 12.55 |
|               |                  | Socket   | 1.541               | 39.14 | .968                | 24.59 |                                    |                     | 1.312 | 33.32               | .308                              | 7.82 |                     |      | .494 | 12.55 |
| В             | 25               | Plug     | 2.088               | 53.04 |                     |       | 1.534                              | 39.00               | 1.852 | 47.04               |                                   |      | .329                | 8.40 | .494 | 12.55 |
|               |                  | Socket   | 2.088               | 53.04 | 1.508               | 38.30 |                                    |                     | 1.852 | 47.04               | .308                              | 7.82 |                     |      | .494 | 12.55 |
| С             | 37               | Plug     | 2.729               | 69.32 |                     |       | 2.182                              | 55.40               | 2.500 | 63.50               |                                   |      | .329                | 8.40 | .494 | 12.55 |
|               |                  | Socket   | 2.729               | 69.32 | 2.156               | 54.76 |                                    |                     | 2.500 | 63.50               | .308                              | 7.82 |                     |      | .494 | 12.55 |
| D             | 50               | Plug     | 2.635               | 66.93 |                     |       | 2.079                              | 52.80               | 2.406 | 61.11               |                                   |      | .436                | 8.40 | .605 | 15.37 |
|               |                  | Socket   | 2.635               | 66.93 | 2.062               | 52.34 |                                    |                     | 2.406 | 61.11               | .420                              | 7.82 |                     |      | .605 | 15.37 |





#### **Features**

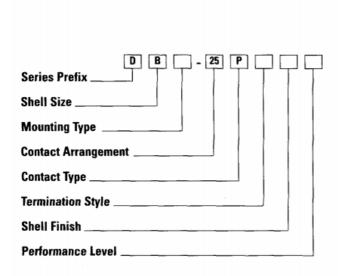
- Standards RS232 interface
- Bright tin finish & grounding indents available for EMI/RFI shielding
- Meets Dimensional requirements of MIL-C-24308, BS9523, F0018 & DIN 41652
- UL 94V-0 rated insulators
- Compatible with all other D sub-miniatures

#### **Technical Data**

| Termination Options  | Solder Bucket,                          | Proof Voltage         | 2.5 Kv d.c. or a.c. peak   |
|--|---|-----------------------|--|
|  | Flow Solder Straight & 90°<br>Wire ware | Working Voltage       | 750V d.c. or a.c. peak   |
| Number of Contacts   | 9 15 25 37 50                           | Contact Resistance    | 5 x 10 <sup>-3</sup> Ω max   |
| Maximum Insertion &<br>Extraction Force                            | 30 50 83 123 167N                       | Insulation Resistance | ≥ 5 x 10° Ω  |
| Performance Level  | 1, 2 or 3                               | Temperature Range     | - 55° to +125°C  |
| Wire Accommodation   | ≤ 0.5 mm² (20AWG)                       | Insulator Materials   | GF Polyester. UL 94V-0 Rated   |
| Plug Contact Material<br>Socket Contact Material<br>Current rating | Copper Alloy<br>Copper Alloy<br>5A      | Shell Materials       | Steel - Zinc plated with<br>yellow chromate passivation<br>include bright tin finish |

**Series Prefix** 

D



Shell Size E, A, B, C or D **Mounting Type** B -4-40 rivnut for rear panel mounting -M3 rivnut for rear panel mounting -with female screw locks fitted -4-40 clinch-out for rear panel mounting with locking feature for high vibration applications -Float mount for rear panel mounting -Universal float mount No designation -Ø 3.05 mm mounting hole 90° Flow Solder versions are not available with float mounts Contact Arrangement 9, 15, 25, 37 or 50 **Contact Type** P or S **Termination Style** 90° Flow Solder European Footprint 1AON -without brackets 1A1N -with plastic brackets 1A2N -with plastic brackets and keeper moulding 1A3N -with metal mounting brackets\* -with earthing straps on plastic brackets with keeper moulding\* 1AEN 1ASN -with boardlock, earthing straps, plastic bracket and keeper moulding' For reverse orientation of contacts relative to shell, replace N with R \*Please specify rivnuts or screw locks, mounting type B, P, or D (Rivnuts standard) OL2 - Termination 0.6mm, 5.3mm Long
-As OL2 with vertical Board locks 4/40 threads
-0.61mm square section pins for up to 3 wraps Straight Flow Solder Mini Wire Wrap Solder Bucket Shell Finish No designation required T -Bright tin -Bright tin with grouding indents (plugs only) ŤΙ Zinc plated with yellow chromate passivation.
-DIN Class 2
-Exceeds DIN Class 2 No designation Performance Level

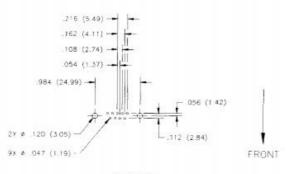
-Performance level 3

No designation

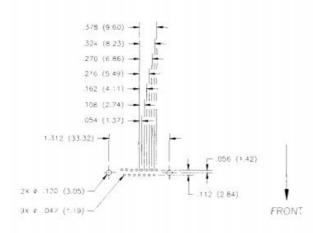


# **ENGLISH**

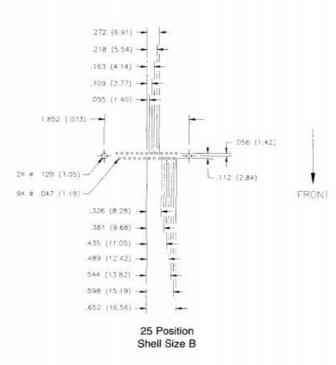
#### Standard Density D-subminiature Mounting Dimensions Board Layouts Footprints (Component side shown)



9 Position Shell Size E



15 Position Shell Size A



The footprints on this page are standard for all metal shell D-subminiature connectors.

On all right-angle D-subminiature connectors, the short row of contacts is positioned closest to the edge of the board.

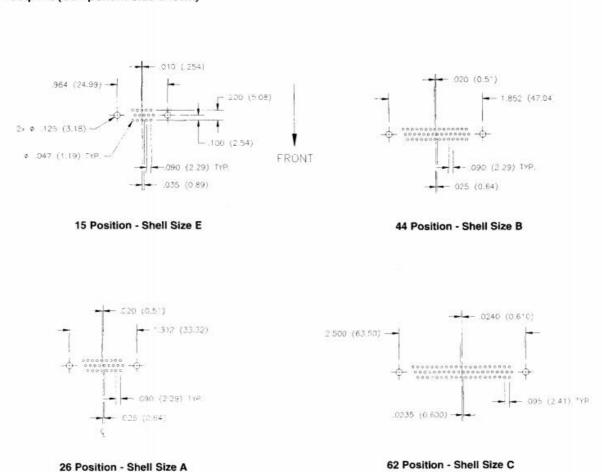
#### PC Board Lead Hole Size

| Termir | nal Dia.  | Hole Dia. |      |  |  |
|--------|-----------|-----------|------|--|--|
| in     | mm        | in        | mm   |  |  |
| .040   | 1.02      | .055      | 1.40 |  |  |
| 030    | 0.76      | .045      | 1.14 |  |  |
| 024025 | 0.61-0.64 | .039      | 0.99 |  |  |



# **ENGLISH**

#### 1.5 Density D-subminiature Recommended PCB Layout for Footprint (Component side shown)



The footprints on this page are standard for all metal shell D-subminiature connectors.

On all right-angle D-subminiature connectors, the short row of contacts is positioned closest to the edge of the board.

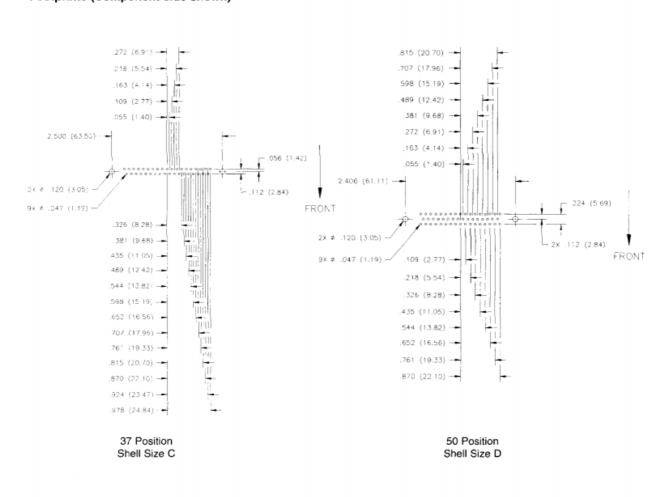
#### PC Board Lead Hole Size

| Termin  | nal Dia.  | Hole Dia. |      |  |  |
|---------|-----------|-----------|------|--|--|
| in      | mm        | in        | mm   |  |  |
| .040    | 1.02      | .055      | 1.40 |  |  |
| .030    | 0.76      | .045      | 1.14 |  |  |
| .024025 | 0.61-0.64 | .039      | 0.99 |  |  |



## **ENGLISH**

Standard Density D-subminiature Mounting Dimensions Board Layouts Footprints (Component side shown)



The footprints on this page are standard for all metal shell D-subminiature connectors.

On all right-angle D-subminiature connectors, the short row of contacts is positioned closest to the edge of the board.

PC Board Lead Hole Size

| Termin  | al Dia.   | Hole Dia. |      |  |  |
|---------|-----------|-----------|------|--|--|
| in      | mm        | in        | mm   |  |  |
| .040    | 1.02      | .055      | 1.40 |  |  |
| .030    | 0.76      | .045      | 1.14 |  |  |
| .024025 | 0.61-0.64 | .039      | 0.99 |  |  |