

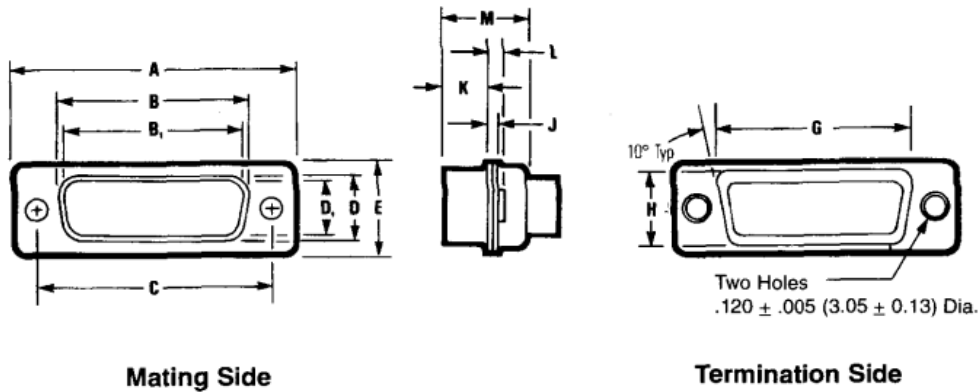
# Datasheet

## 25 Way Right Angle Through Hole Mount PCB D-sub Connector

RS Stock 470-875



### Dimensions: (mm)



Shell Size	Connector Positions	Connector Type	A±.015" (0.38mm)		B±.010" (0.25mm)		B <sub>1</sub> ±.005" (0.13 mm)		C±.005" (0.13mm)		D±.010" (0.25mm)		D <sub>1</sub> ±.010" (0.25mm)		E±.010" (0.25mm)	
			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
A	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
B	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
C	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

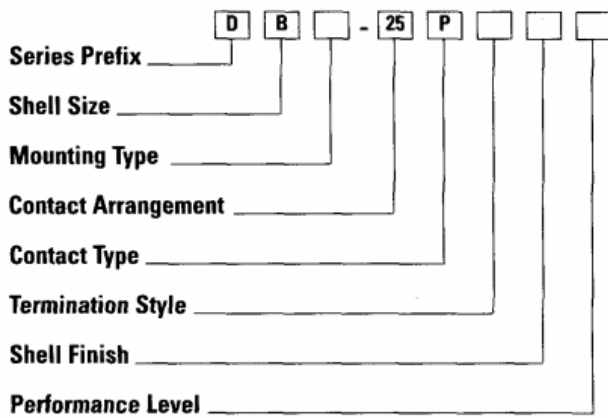


**Features**

- 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

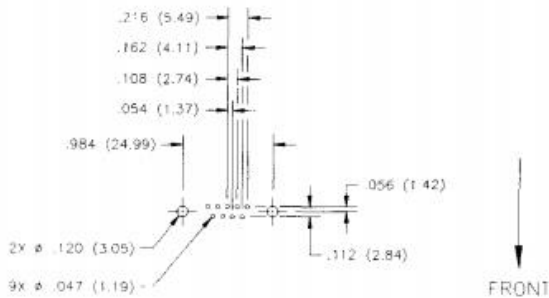
**Technical Data**

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

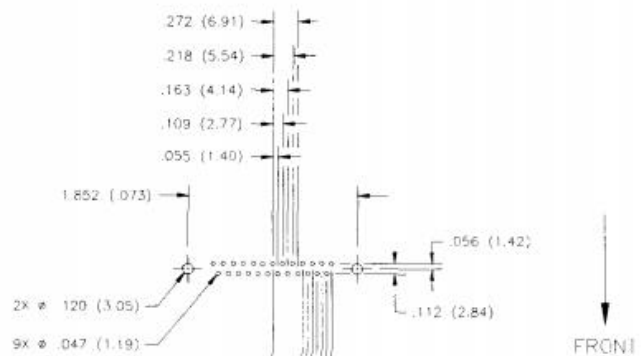


- Series Prefix** D
- Shell Size** E, A, B, C or D
- Mounting Type**
- B** -4-40 rivnut for rear panel mounting
  - P** -M3 rivnut for rear panel mounting
  - D** -with female screw locks fitted
  - E** -4-40 clinch-out for rear panel mounting with locking feature for high vibration applications
  - F** -Float mount for rear panel mounting
  - Y** -Universal float mount
- No designation** - $\varnothing$  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
- 1A0N** -without brackets
- 1A1N** -with plastic brackets
- 1A2N** -with plastic brackets and keeper moulding
- 1A3N** -with metal mounting brackets\*
- 1AEN** -with earthing straps on plastic brackets with keeper moulding\*
- 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)
- Straight Flow Solder** **OL2** -Termination 0.6mm, 5.3mm Long
- BL2** -As OL2 with vertical Board locks 4/40 threads
- Solder Bucket** **F179A** -0.61mm square section pins for up to 3 wraps
- Mini Wire Wrap** **No designation required**
- Shell Finish** **T** -Bright tin
- Ti** -Bright tin with grounding indents (plugs only)
- No designation** -Zinc plated with yellow chromate passivation.
- Performance Level** **2** -DIN Class 2
- 1** -Exceeds DIN Class 2
- No designation** -Performance level 3

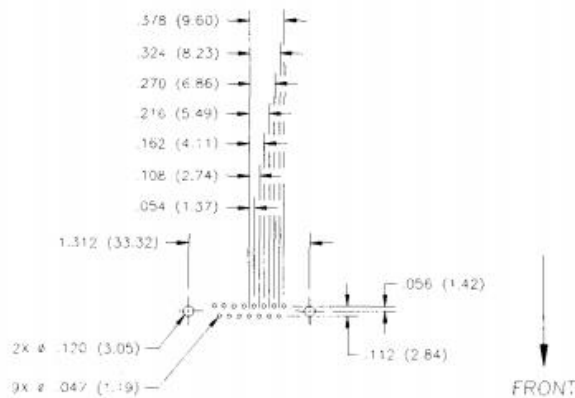
**Standard Density D-subminiature  
Mounting Dimensions Board Layouts  
Footprints (Component side shown)**



**9 Position  
Shell Size E**



**25 Position  
Shell Size B**



**15 Position  
Shell Size A**

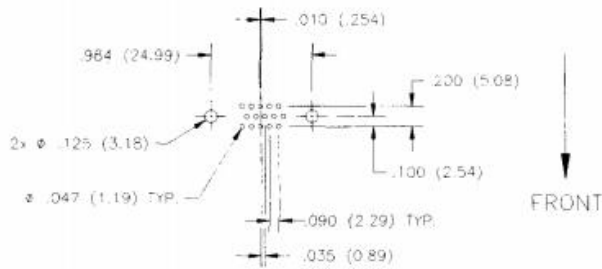
The footprints on this page are standard for all metal shell D-subminiature connectors.

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

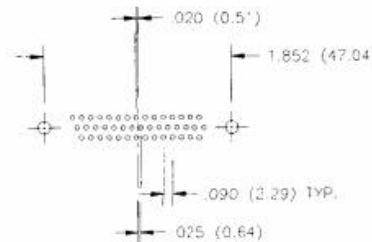
**PC Board Lead Hole Size**

Terminal Dia.		Hole Dia.	
in	mm	in	mm
.040	1.02	.055	1.40
.030	0.76	.045	1.14
.024-.025	0.61-0.64	.039	0.99

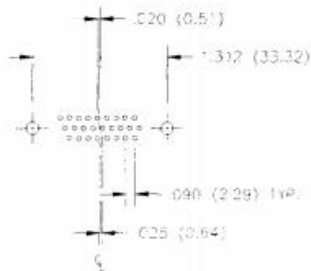
**1.5 Density D-subminiature  
Recommended PCB Layout for  
Footprint (Component side shown)**



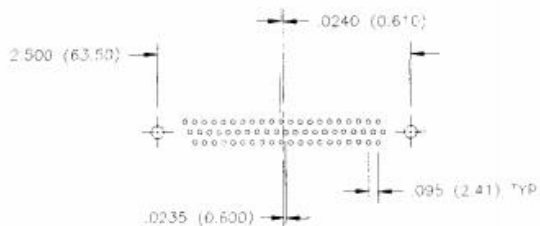
**15 Position - Shell Size E**



**44 Position - Shell Size B**



**26 Position - Shell Size A**



**62 Position - Shell Size C**

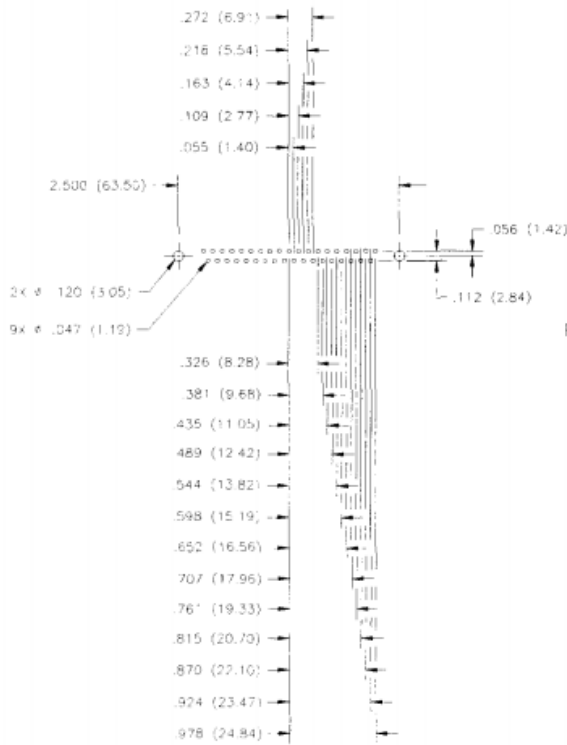
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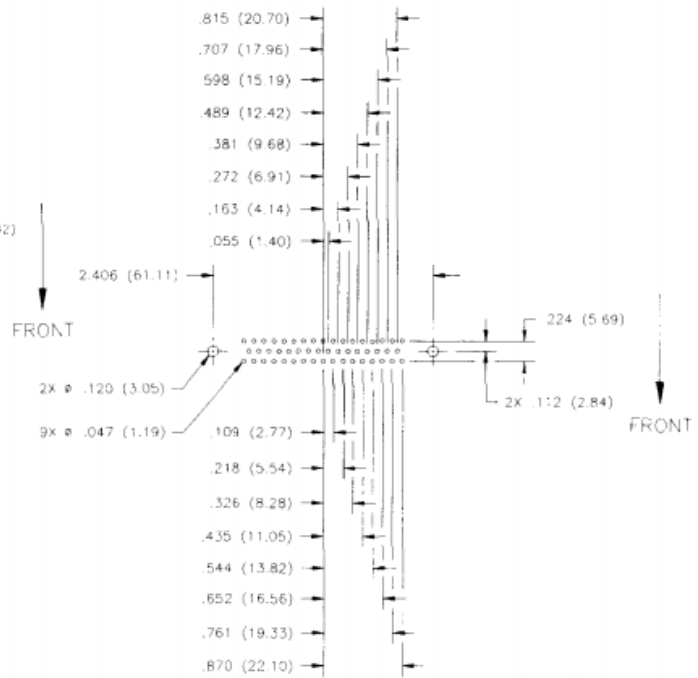
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.040	1.02	.055	1.40
.030	0.76	.045	1.14
.024-.025	0.61-0.64	.039	0.99

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



37 Position  
Shell Size C



50 Position  
Shell Size D

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

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**PC Board Lead Hole Size**

Terminal Dia.		Hole Dia.	
in	mm	in	mm
.040	1.02	.055	1.40
.030	0.76	.045	1.14
.024-.025	0.61-0.64	.039	0.99