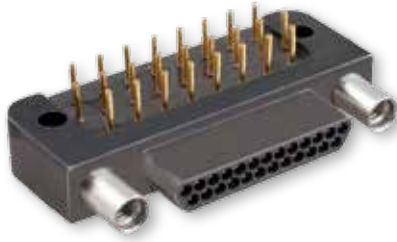


# MWDL Low Profile Plastic Shell Micro-D Right Angle PCB Termination



Micro-D Double  
and Triple Row



Low profile MWDL connectors have reduced flange height compared to standard MWDM Micro-D connectors. These thru-hole "CBR" style Micro-D connectors have solder dipped leads, gold-plated leads optional on .100" centers. Connectors are backfilled with epoxy. Pin contacts are gold-plated high performance TwistPin type and are recessed into insulator to prevent damage. Socket contacts are gold plated, machined copper alloy. Stainless steel hardware. Optional #2-56 threaded inserts in board mounting holes. Glass-filled LCP thermoplastic insulators and tray withstand immersion in +260C solder for 10 seconds. Meets performance requirements of MIL-DTL-83513, Class P. Available with 9 to 51 contacts. 3 A., 600 Vac, -55°C to +150°C.

E

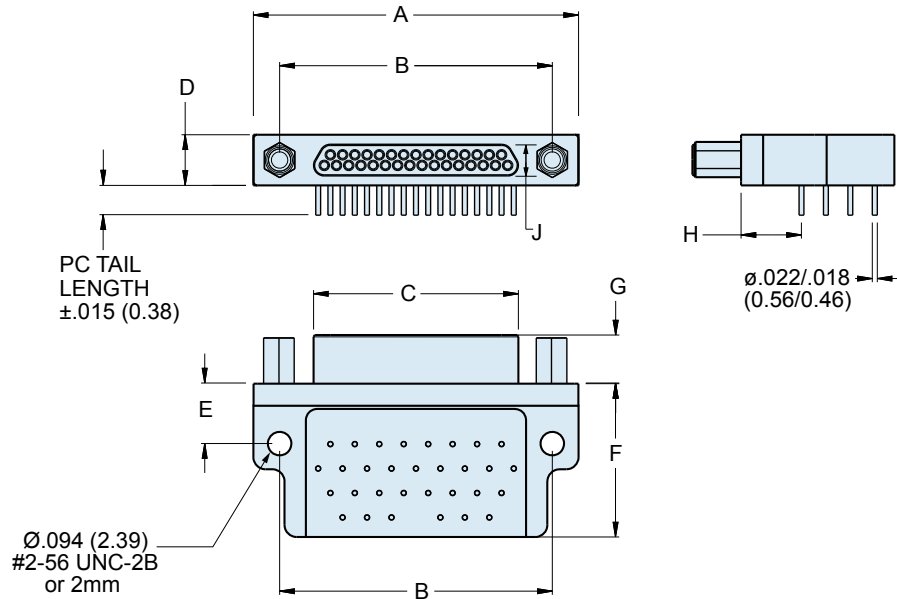
How To Order Right Angle PCB Connector	
<b>Sample Part Number</b>	MWDL -21 S CBR P T .110 -513
<b>Series</b>	MWDL - Low Profile Plastic Shell Micro-D
<b>Contact Layout</b>	9, 15, 21, 25, 31, 37, 51
<b>Contact Type</b>	P - Pin Contacts S - Socket Contacts
<b>Termination Type</b>	CBR - Condensed Board Right Angle
<b>Hardware Option</b>	(Omit for None) P - Jackpost Jackposts for Rear Panel Mounting R1 - .032" Panel R2 - .047" Panel R3 - .062" Panel R4 - .093" Panel R5 - .125" Panel R6 - .125" Panel (See Table I)
<b>Threaded Insert Option</b>	Omit - For Thru-Holes T - Threaded Inserts in Board Mounting Holes. #2-56 Female Thread. M - Threaded Inserts in Board Mounting Holes. M2 Metric Thread.
<b>PC Tail Length</b>	.110, .125, .150, .190, .250
<b>Gold-Plated Terminal Mod Code</b>	Omit - These connectors are solder-dipped in 60/40 tin lead solder. To delete the solder dip and change to gold-plated terminal add code 513

Table I: Jackpost Options		
No Designator	P	R1 Thru R5
<p>THREADED INSERT</p>		<p>Panel</p>
<p>Thru-Hole For use with Glenair jackposts only. Order hardware separately. Install with threadlocking compound.</p>	<p>Standard Jackpost Factory installed, not intended for removal.</p>	<p>Jackpost for Rear Panel Mounting Shipped loosely installed. Install with permanent threadlocking compound.</p>



# MWDL Low Profile Plastic Shell Micro-D Right Angle PCB Termination

Table I: Dimensions



Layout	A Max.		B		C Max.		D Max.		E		F Max.		G Max.		H		J	
	In.	mm.	In. ±.003	mm. ±0.08	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In. ±.010	mm. ±0.25	In.	mm.
9P	.788	20.02	.565	14.35	.292	7.42	.218	5.54	.250	6.35	.425	10.80	.202	5.13	.230	5.84	.134	3.40
9S	.788	20.02	.565	14.35	.380	9.65	.218	5.54	.250	6.35	.425	10.80	.185	4.70	.230	5.84	.218	5.54
15P	.938	23.83	.715	18.16	.442	11.23	.218	5.54	.250	6.35	.425	10.80	.202	5.13	.130	3.30	.134	3.40
15S	.938	23.83	.715	18.16	.530	13.46	.218	5.54	.250	6.35	.425	10.80	.185	4.70	.130	3.30	.218	5.54
21P	1.088	27.64	.865	21.97	.592	15.04	.218	5.54	.250	6.35	.425	10.80	.202	5.13	.130	3.30	.134	3.40
21S	1.080	27.64	.865	21.97	.680	17.27	.218	5.54	.250	6.35	.425	10.80	.185	4.70	.130	3.30	.218	5.54
25P	1.188	30.18	.965	24.51	.692	17.58	.218	5.54	.250	6.35	.425	10.80	.202	5.13	.130	3.30	.134	3.40
25S	1.185	30.18	.965	24.51	.780	19.81	.218	5.54	.250	6.35	.425	10.80	.185	4.70	.130	3.30	.218	5.54
31P	1.338	33.99	1.115	28.32	.842	21.39	.218	5.54	.250	6.35	.525	13.34	.202	5.13	.130	3.30	.134	3.40
31S	1.338	33.99	1.115	28.32	.930	23.62	.218	5.54	.250	6.35	.525	13.34	.185	4.70	.130	3.30	.218	5.54
37P	1.488	37.80	1.265	32.13	.992	25.20	.218	5.54	.250	6.35	.525	13.34	.202	5.13	.130	3.30	.134	3.40
37S	1.488	37.80	1.265	32.13	1.080	27.43	.218	5.54	.250	6.35	.525	13.34	.185	4.70	.130	3.30	.218	5.54
51P	1.438	36.53	1.215	30.86	.942	23.93	.260	6.60	.300	7.62	.660	16.76	.202	5.13	.150	3.81	.177	4.50
51S	1.438	36.53	1.215	30.86	1.030	26.16	.260	6.60	.300	7.62	.660	16.76	.185	4.70	.150	3.81	.260	6.60

Performance Specifications	
Current Rating	3 AMP
DWV	600 VAC Sea level
Insulation Resistance	5000 Megohms Minimum
Contact Resistance	8 Milliohms Maximum
Operating Temperature	-55° C. to +150° C.
Shock, Vibration	50 g., 20g.
Mating Force	(10 Ounces) X (# of Contacts)

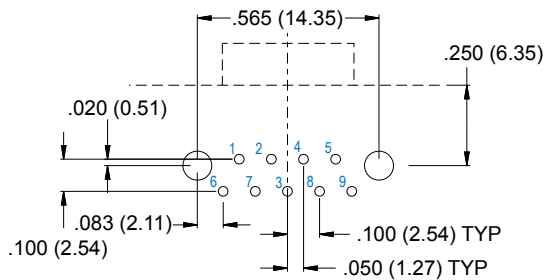
Materials and Finishes	
Connector Body	Liquid Crystal Polymer (LCP), Glass-filled
Pin Contact	Beryllium Copper, Gold over Nickel Plating
Socket Contact	Copper Alloy, Gold Over Nickel Plating
Hardware	300 Series Stainless Steel
Encapsulant	Epoxy

# MWDL Low Profile Plastic Shell Micro-D Right Angle PCB Termination

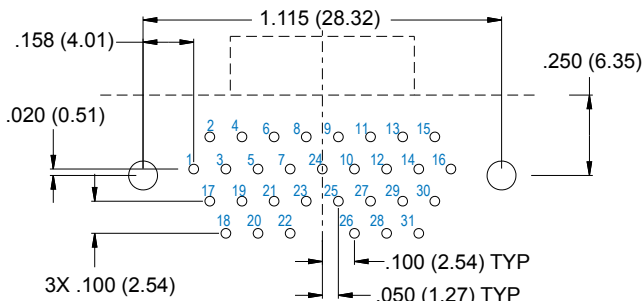


Micro-D Double  
and Triple Row

## MWDL CBR PCB Layouts — Pin Connectors



**9 PIN**



**31 PIN**

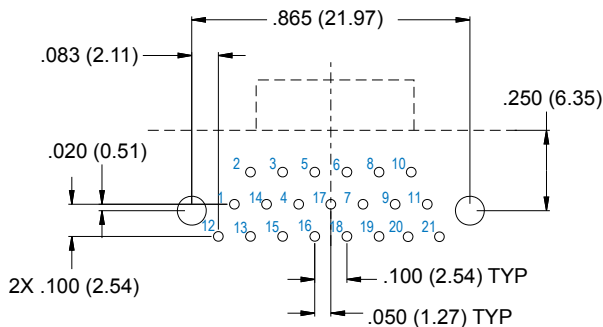


**15 PIN**

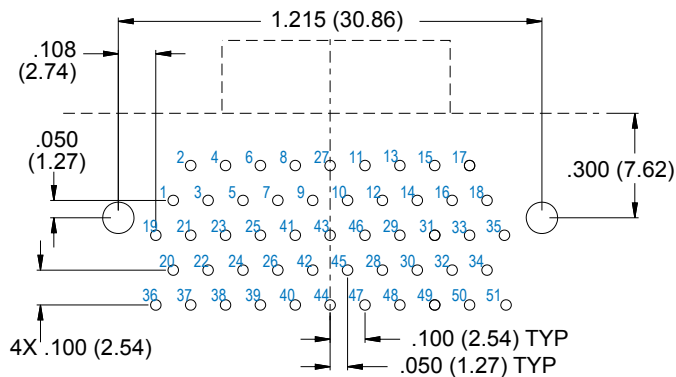


**37 PIN**

**E**



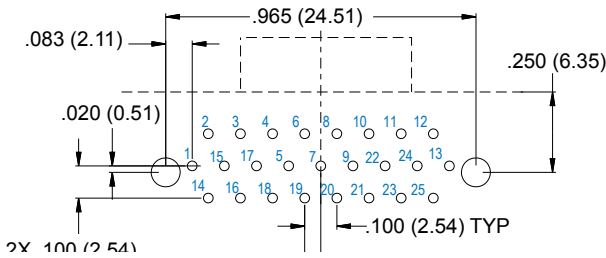
**21 PIN**



**51 PIN**

### Notes

1. Patterns shown are for connector mounting side of PC board.
2. Board mounting holes are .094" (2.39) diameter.
3. PC tails are .022" (0.56) maximum diameter.

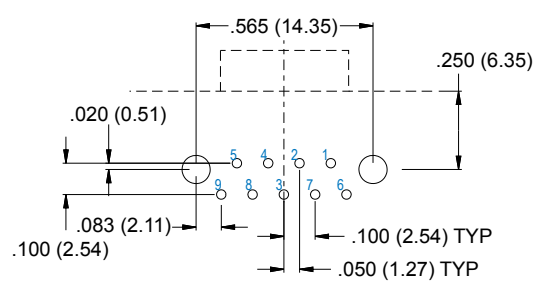


**25 PIN**

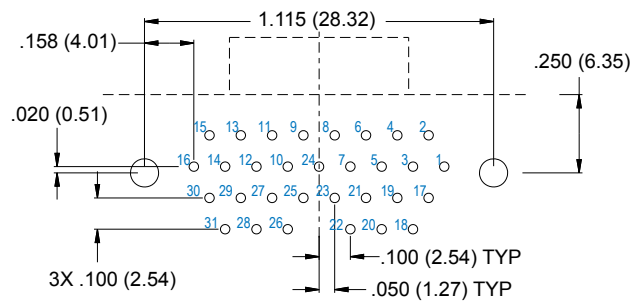


# MWDL Low Profile Plastic Shell Micro-D Right Angle PCB Termination

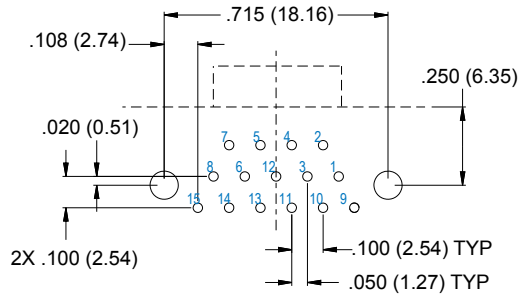
## MWDL CBR PCB Layouts — Socket Connectors



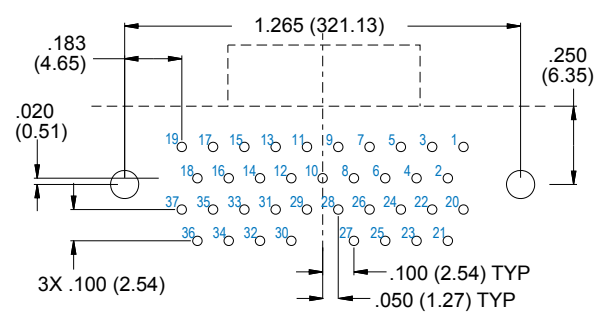
**9 Socket**



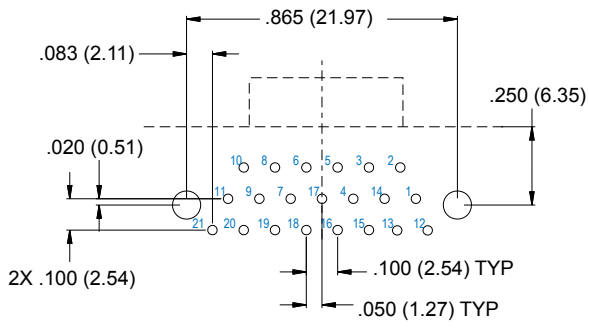
**31 Socket**



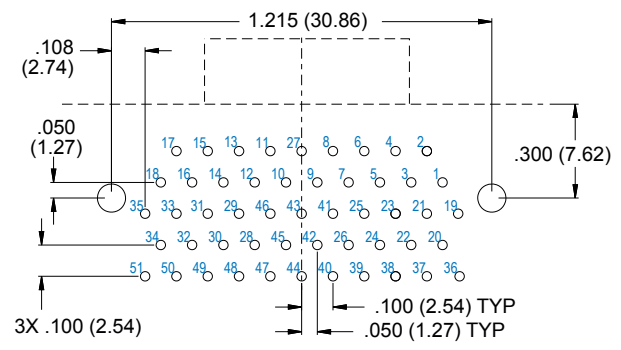
**15 Socket**



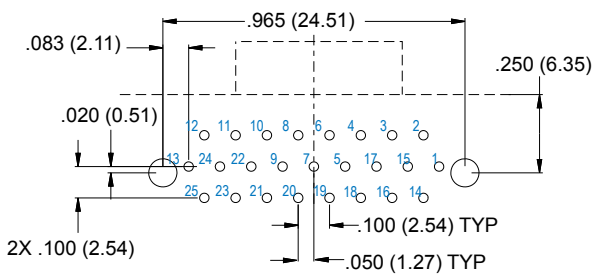
**37 Socket**



**21 Socket**



**51 Socket**



**25 Socket**

**Notes**

1. Patterns shown are for connector mounting side of PC board.
2. Board mounting holes are .094" (2.39) diameter.
3. PC tails are .022" (0.56) maximum diameter.

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