



# Cable to Board (Standard Footprint)

.050"

9 thru 100 Contacts

Rugged Cable

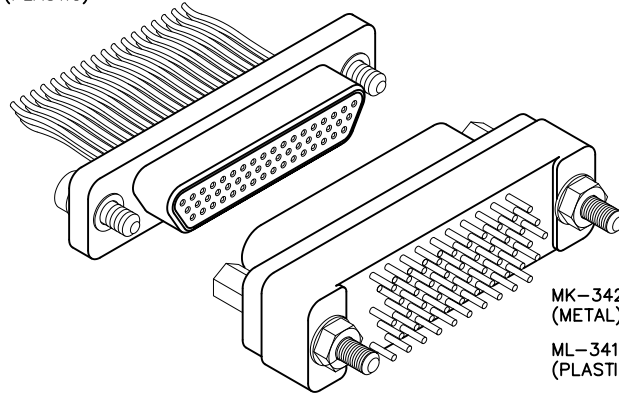
**MM, MN**

Rugged Board Mount

**MK, ML**

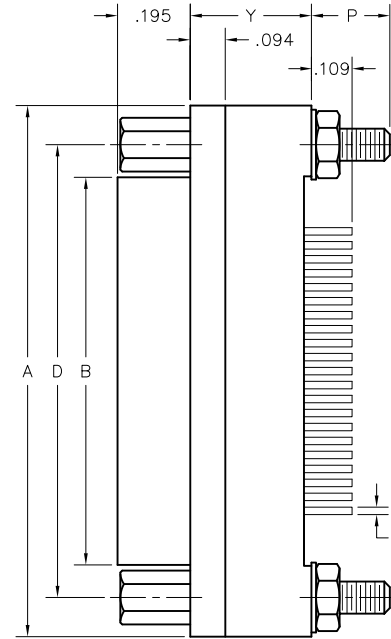
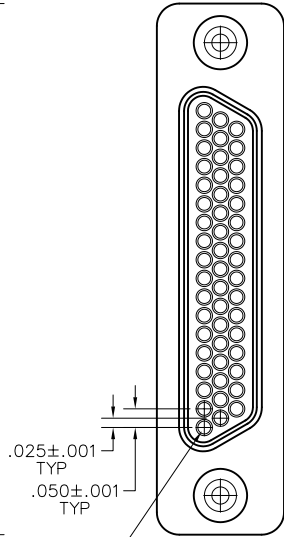
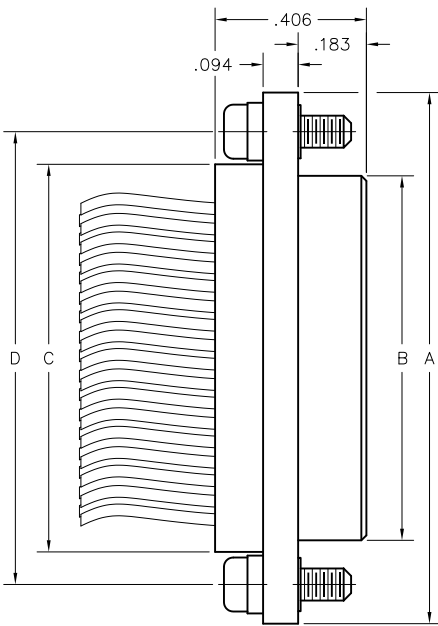
MM-312-051-161-45WP  
(METAL)

MN-311-051-161-45WP  
(PLASTIC)

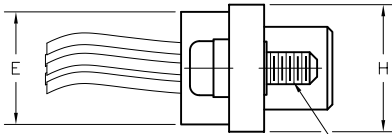


MK-342-051-225-2200  
(METAL)

ML-341-051-225-2200  
(PLASTIC)

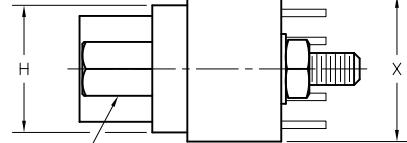


.020±.001  
DIA TYP



#2-56 CAPTIVE  
JACKSCREW (2 PLCS)  
SEE PAGE MA-5

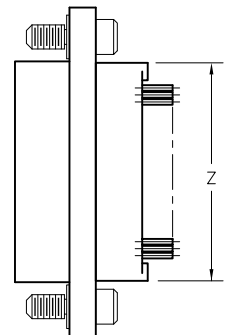
PLUG



#2-56 JACKPOST  
(2 PLCS)  
SEE PAGE MA-5

RECEPTACLE

SIZE	CONTACT ROWS	DIMENSIONS										HARDWARE		
		A	B		C	D	E		H	P	X		Y	Z***
		PLUG MAX	RCPT MAX			POTTING WELL MAX								
9	2	.775	.334	.400	.390	.565	.270	.298	.210	.298	.280	.390	#2-56 UNC THD (#2-56 CLEARANCE OR #2-56 UNC THREADED INSERT)	
15		.925	.484	.550	.540	.715								.540
21		1.075	.634	.700	.690	.865								.690
25		1.175	.734	.800	.790	.965								.780
31		1.325	.884	.950	.940	1.115								.930
37		1.475	1.034	1.100	1.090	1.265	.214	.330**	1.080					
51	3	1.425	.984	1.050	1.040	1.215	.310	.341	.219	.390	.325	1.046	#4-40 UNC THD (#4-40 CLEARANCE OR #4-40 UNC THREADED INSERT)	
69		1.725	1.284	1.350	1.340	1.515								1.346
100		2.160	1.384	1.508	1.432	1.800								.360



\* = 69 POSITION CONNECTORS ARE AVAILABLE IN METAL ONLY.  
 \*\* = 37 POSITION WITH TURNING HARDWARE "Y" DIMENSION IS .280.  
 \*\*\* = "Z" DIMENSION FOR TURNING JACKSCREW ONLY

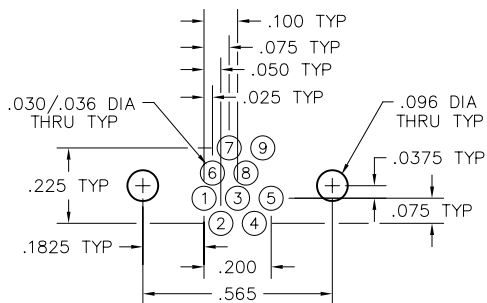
Call (972) 931-3200 Fax (972) 931-9305 www.AirBorn.com



# Recommended PC Board Layout

Straight, Standard Footprint

## RECEPTACLE PC BOARD LAYOUT COMPONENT SIDE



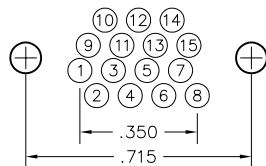
## CONNECTOR MATING FACE (RECEPTACLE)



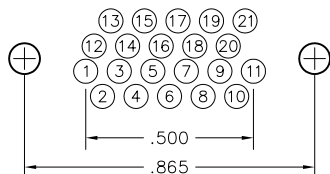
### 9 POSITION



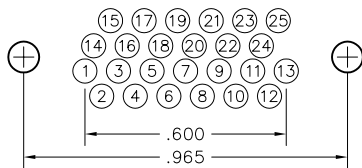
### 15 POSITION



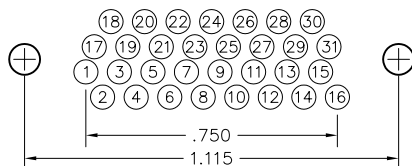
### 21 POSITION



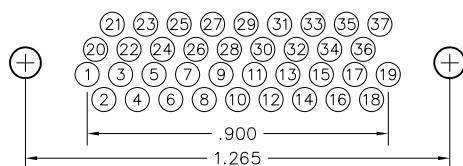
### 25 POSITION



### 31 POSITION



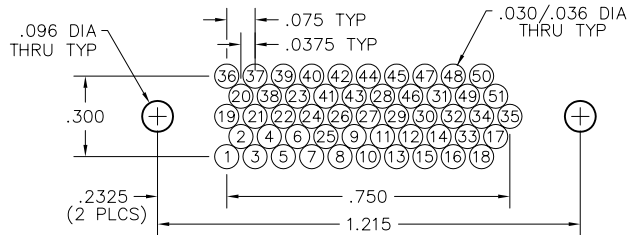
### 37 POSITION



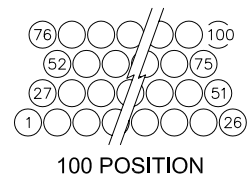
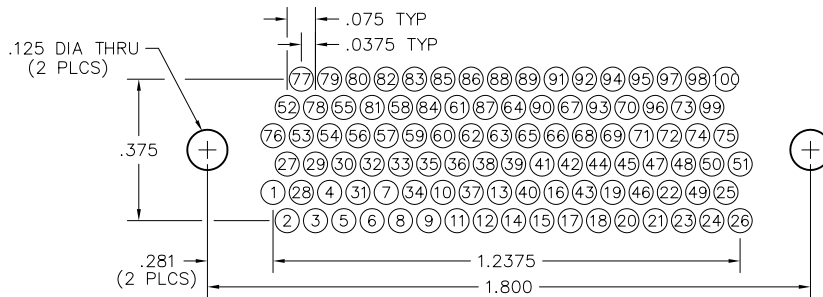
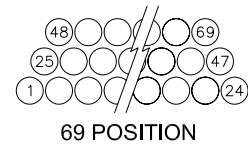
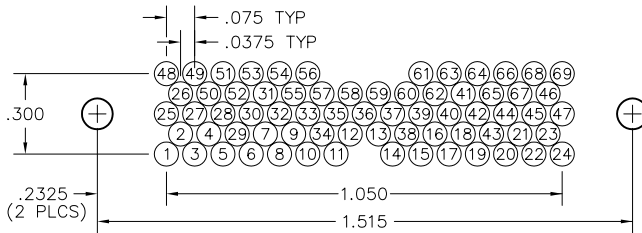
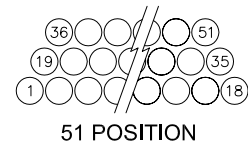
# Recommended PC Board Layout

Straight, Standard Footprint

## RECEPTACLE PC BOARD LAYOUT COMPONENT SIDE



### CONNECTOR MATING FACE (RECEPTACLE)



**PLUG:** MM-312-051-161-45WP  
**RECEPTACLE:** MK-342-051-225-2200  
**PLUG:** MN-311-051-161-45WP  
**RECEPTACLE:** ML-341-051-225-2200  
 XX-XXX-XXX-XXX-XXXX-XXX

PLUG	RECEPTACLE
<b>SERIES</b>	
MM .050" Rugged Metal I/O Connector MN .050" Rugged Plastic I/O Connector (MM & MN mate with MK, ML, MM, MN receptacles)	MK .050" Rugged Metal PC Board Mount Connector ML .050" Rugged Plastic PC Board Mount Connector (MK & ML mate with MK, ML, MM, MN plugs)
<b>BODY</b>	
2 2-Row (Sizes 9 thru 37) 3 3-Row (Size 51 & 69***) 4 4-Row (Size 100)	2 2-Row (Sizes 9 thru 37) 3 3-Row (Size 51 & 69***) 4 4-Row (Size 100)
<b>BODY STYLE:</b> 1 Plug, straight, with ears	<b>BODY STYLE:</b> 4 Receptacle, straight, standard footprint
<b>BODY MATERIAL:</b> 1 Polyphenylene Sulfide (MN only) 2 Polyphenylene Sulfide with electroless nickel shell 3 Polyphenylene Sulfide with electrodeposited cadmium shell <input checked="" type="checkbox"/> 4 Polyphenylene Sulfide with hard anodized black shell 5 Polyphenylene Sulfide with stainless steel shell	<b>BODY MATERIAL:</b> 1 Polyphenylene Sulfide (ML only) 2 Polyphenylene Sulfide with electroless nickel shell 3 Polyphenylene Sulfide with electrodeposited cadmium shell <input checked="" type="checkbox"/> 4 Polyphenylene Sulfide with hard anodized black shell 5 Polyphenylene Sulfide with stainless steel shell
<b>SIZE</b>	
XXX 009, 015, 021, 025, 031, 037, 051, 069***, 100	XXX 009, 015, 021, 025, 031, 037, 051, 069***, 100
<b>CONTACTS</b>	
<b>TYPE CONTACTS/TERMINATIONS:</b> 11 Pin, straight, solder cup 14 Pin, straight, .500" pigtails (.018 dia) 15 Pin, straight, 1.000" pigtails (.018 dia) 16 Pin, straight, crimped wire	<b>TYPE CONTACTS/TERMINATIONS:</b> 22 Socket, straight, PCB leads, .109" 23 Socket, straight, PCB leads, .140" 24 Socket, straight, PCB leads, .172"
<b>PLATING OPTIONS:</b> 1 50 μ" Au contacts (crimp wire) 3 50 μ" Au contacts; 10 μ" Au terminations (solder cup, pigtail) 5 50 μ" Au contacts; Sn/Pb alloy terminations (pigtail) <input checked="" type="checkbox"/> 7 50 μ" Au contacts; SAC305 terminations (pigtail)	<b>PLATING OPTIONS:</b> 3 50 μ" Au contacts; 10 μ" Au terminations 5 50 μ" Au contacts; Sn/Pb alloy terminations <input checked="" type="checkbox"/> 7 50 μ" Au contacts; SAC305 terminations
<b>HARDWARE</b>	
<b>STYLE OF HARDWARE:</b> 00 None 22 Two fixed jacknut assemblies (62*) 41 Two turning jackscrews, allen head, retaining ring (81*) 42 Two long turning jackscrews, allen head, retaining ring (82*) 43 Two turning jackscrews, slot head, retaining ring (83*) 44 Two long turning jackscrews, slot head, retaining ring (84*) 45 Two turning jackscrews, allen head, captivated** (85*) 99 Keying hardware, see options below (Body material 2, 3 and 4 only)	<b>STYLE OF HARDWARE:</b> 00 None 22 Two fixed jacknut assemblies (62*) 41 Two turning jackscrews, allen head, retaining ring**** (81*) 99 Keying hardware, see options below (Body material 2, 3 and 4 only)
<b>POLARIZATION / WIRING:</b> 00 None XX For wiring codes, see page MA-3 & MA-4	<b>POLARIZATION / WIRING</b> 00 None
<b>OPTIONS</b>	
KSXX Two turning jackscrews. See page MA-6 for keying options (KJ*)	KPXX Two fixed jacknuts and interfacial sealing gasket. See page MA-6 for keying options (KN*) 900 Interfacial sealing gasket 0B7 Threaded inserts and interfacial sealing gasket

\* = Use numbers or letters in parenthesis when ordering size 100.      \*\*\* = 69 position connectors are available in metal only.  
 \*\* = Captive hardware is factory installed and non-removable.      \*\*\*\* = Connector body has no mounting holes.  
 = Option not RoHS compliant

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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[MK-243-015-225-2200](#) [MK-242-009-235-2200](#) [MK-242-037-235-2200](#) [MK-243-009-225-2200](#) [MK-242-025-235-2200](#)

[MK-243-037-235-2200-900](#)