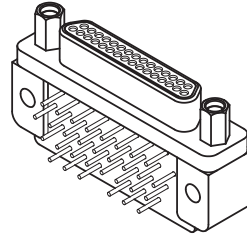


Right Angle Boardmount (Narrow Footprint)

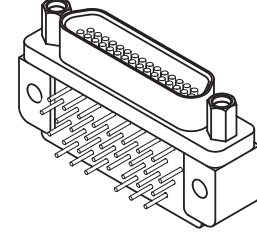
.050"
9 thru 100 Contacts

MK, ML

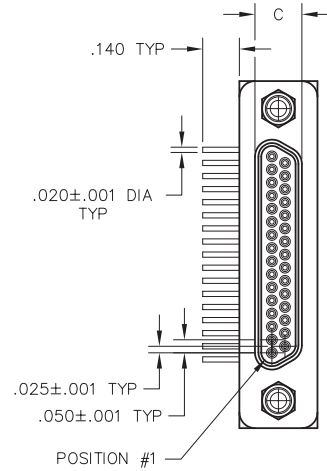
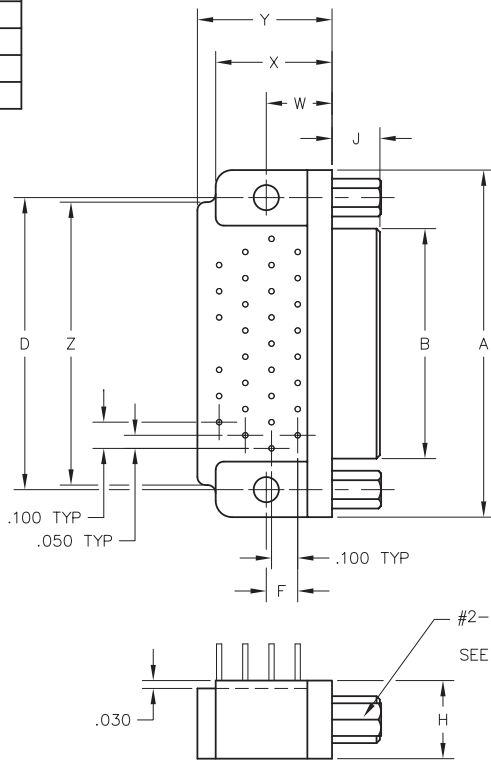
MK-252-031-335-220S (PLUG)



MK-262-031-445-220S (RCPT)



MATING MATRIX	
CONNECTOR	MATES WITH
MK-25...	MK, ML, MM, MN receptacles
ML-25...	MK, ML, MM, MN receptacles
MK-26..	MK, ML, MM, MN plugs
ML-26..	MK, ML, MM, MN plugs



(PLUG SHOWN)

DIMENSIONS																	
SIZE	CONTACT ROWS	A	B		C		D	F	H	J		W	X MAX	Y MAX	Z	HARDWARE	MOUNTING HOLE
			PLUG MAX	RCPT MAX	PLUG MAX	RCPT MAX				PLUG	RCPT						
9	2	.775	.334	.400	.185	.251	.565	.020	.298	.183	.195	.250	.420	.420	1.075	#2-56 UNC THD	.096 DIA OR #2-56 UNC THREADED INSERT
15		.925	.484	.550			.715	.120									
21		1.075	.634	.700			.865										
25		1.175	.734	.800			.965										
31		1.325	.884	.950			1.115										
37	1.475	1.034	1.100	1.265	.341												
51	3	1.425	.984	1.050		.228	.294	1.215	.150	.300	.430	.650	1.220				
69	1.725	1.284	1.350	1.515													
100	4	2.160	1.384	1.508	.271	.394	1.800	.200	.384	.400	.590	1.000	1.810	#4-40 UNC THD	.125 DIA #2-56 UNC INSERT #4-40 UNC INSERT		

— CLICK HERE —

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Polarized Keying Hardware

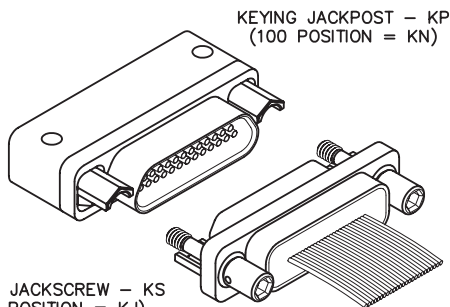


Select the appropriate two digit number above and include as the last two digits of the hardware code in the part number. (Keying hardware is factory installed and non-removable).

Example:

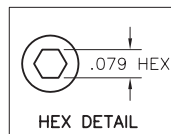
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MK-263-025-435-990S-KP11

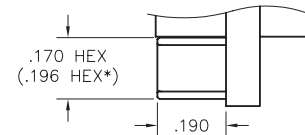


KEYING JACKSCREW - KS
(100 POSITION = KJ)

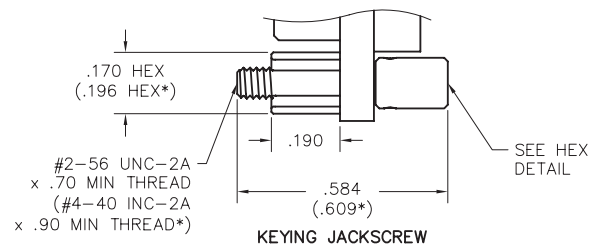
KEYING JACKPOST - KP
(100 POSITION = KN)



HEX DETAIL



KEYING JACKPOST



KEYING JACKSCREW

* = Dimensions for 100 position connectors

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PLUG: MK-252-031-335-220S
RECEPTACLE: MK-262-031-445-220S
XX-XXX-XXX-XXX-XXXX-XXX
| BODY | CONTACTS | OPTIONS
| SERIES | SIZE | HARDWARE

PLUG

SERIES

MK .050" Rugged Metal PC Board Mount Connector
ML .050" Rugged Plastic PC Board Mount Connector
(MK & ML mate with MK, ML, MM, MN, receptacles)

BODY

- 2 2-Row (Sizes 9 thru 37)
 - 3 3-Row (Size 51 & 69***)
 - 4 4-Row (Size 100)
- BODY STYLE:
- 5 Plug, right angle, narrow footprint, w/ mounting holes
- BODY MATERIAL:
- 1 Polyphenylene Sulfide (ML only)
 - 2 Electroless nickel shell w/ PPS insulator
 - 3 Electrodeposited cadmium shell w/ PPS insulator
 - 4 Hard anodized black shell w/ PPS insulator
 - 5 Stainless steel shell w/ PPS insulator

SIZE

XXX 009, 015, 021, 025, 031, 037, 051, 069***, 100

CONTACTS

- TYPE CONTACTS/TERMINATIONS:
- 32 Pin, right angle, PCB leads, .109"
 - 33 Pin, right angle, PCB leads, .140"
 - 34 Pin, right angle, PCB leads, .172"
- PLATING OPTIONS:
- 3 50 μ" Au contacts: Au terminations
 - 5 50 μ" Au contacts: Sn/Pb alloy terminations
 - 7 50 μ" Au contacts: SAC305 terminations

HARDWARE

- STYLE OF HARDWARE:
- 00 None
 - 22 Two fixed jacknuts (62*)
 - 41 Two turning jackscrews, allen head, retaining ring****(81*)
 - 99 Keying hardware, see options below (Body material 2, 3 and 4 only)
- POLARIZATION / WIRING:
- 0R Reversed body polarization
 - 0S Standard body polarization

OPTIONS

- KPXX Two fixed jacknuts (KN*)
- 94P Mil-Spec footprint (size 100 only), standard body polarization
- 0B7 #2-56 threaded inserts, standard body polarization
- 0BJ Mil-Spec footprint (size 100 only) with #2-56 threaded inserts, standard body polarization
- 0H7 #4-40 threaded inserts (size 100 only), standard body polarization
- 0H6 Mil-Spec footprint (size 100 only) with #4-40 threaded inserts, standard body polarization

NOTES

See page MA-6 for keying options
* = Use numbers in parenthesis when ordering size 100.
*** = 69 position connectors are available in metal only.
**** = Connector body has no mounting holes.
 = Option not RoHS compliant

RECEPTACLE

SERIES

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)

BODY

- 2 2-Row (Sizes 9 thru 37)
 - 3 3-Row (Size 51 & 69***)
 - 4 4-Row (Size 100)
- BODY STYLE:
- 6 Receptacle, right angle, narrow footprint, w/ mounting holes
- BODY MATERIAL:
- 1 Polyphenylene Sulfide (ML only)
 - 2 Electroless nickel shell w/ PPS insulator
 - 3 Electrodeposited cadmium shell w/ PPS insulator
 - 4 Hard anodized black shell w/ PPS insulator
 - 5 Stainless steel shell w/ PPS insulator

SIZE

XXX 009, 015, 021, 025, 031, 037, 051, 069***, 100

CONTACTS

- TYPE CONTACTS/TERMINATIONS:
- 43 Socket, right angle, PCB leads, .109"
 - 44 Socket, right angle, PCB leads, .140"
 - 45 Socket, right angle, PCB leads, .172"
- PLATING OPTIONS:
- 3 50 μ" Au contacts: Au terminations
 - 5 50 μ" Au contacts: Sn/Pb alloy terminations
 - 7 50 μ" Au contacts: SAC305 terminations

HARDWARE

- STYLE OF HARDWARE:
- 00 None
 - 22 Two fixed jacknuts (62*)
 - 41 Two turning jackscrews, allen head, retaining ring****(81*)
 - 99 Keying hardware, see options below (Body material 2, 3 and 4 only)
- POLARIZATION / WIRING:
- 0R Reversed body polarization
 - 0S Standard body polarization

OPTIONS

- KPXX Two fixed jacknuts (KN*) and interfacial sealing gasket.
- 900 Interfacial sealing gasket
- 0B7 #2-56 Threaded inserts and interfacial sealing gasket standard body polarization
- 0H7 #4-40 threaded inserts (size 100 only), and interfacial sealing gasket, standard body polarization

NOTES

See page MA-6 for keying options
* = Use numbers in parenthesis when ordering size 100.
*** = 69 position connectors are available in metal only.
**** = Connector body has no mounting holes.
 = Option not RoHS compliant

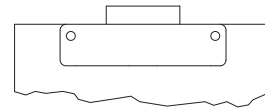
— CLICK HERE —

Recommended PC Board Layout

Right Angle, Narrow Footprint
Standard Polarization

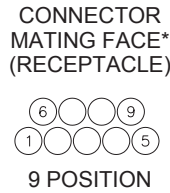
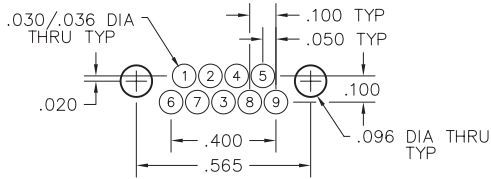


CONNECTOR MATING FACE

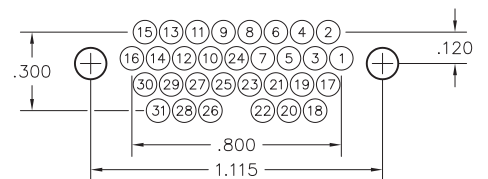
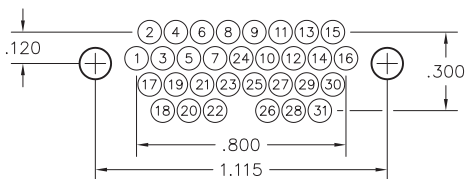
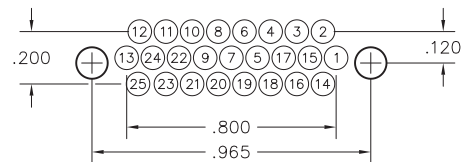
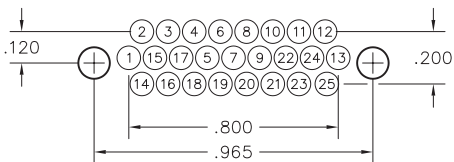
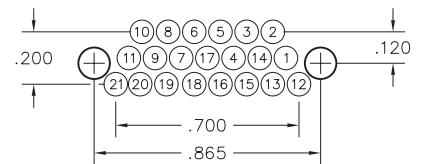
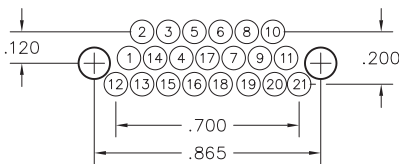
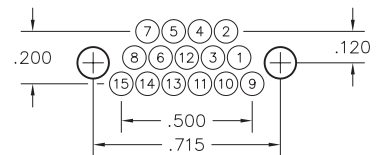
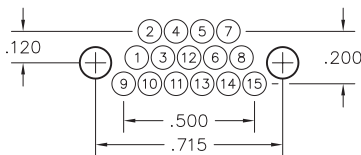
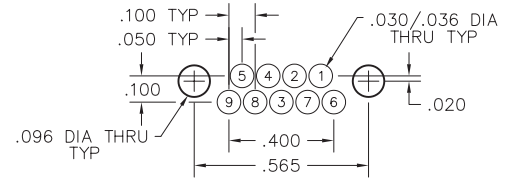


PC BOARD LAYOUT
COMPONENT SIDE

PLUG
PC BOARD LAYOUT
COMPONENT SIDE



RECEPTACLE
PC BOARD LAYOUT
COMPONENT SIDE



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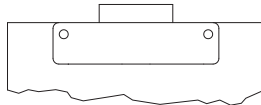
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CONNECTOR MATING FACE

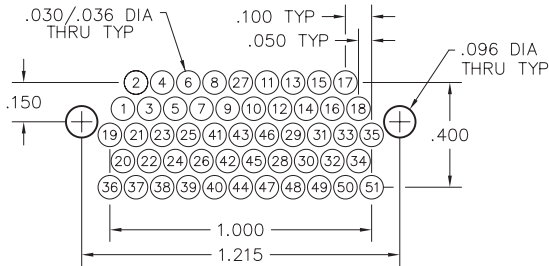


PC BOARD LAYOUT
COMPONENT SIDE

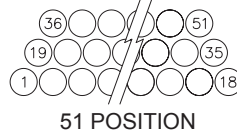
Recommended PC Board Layout

Right Angle, Narrow Footprint
Standard Polarization

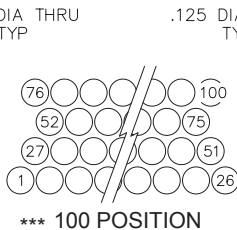
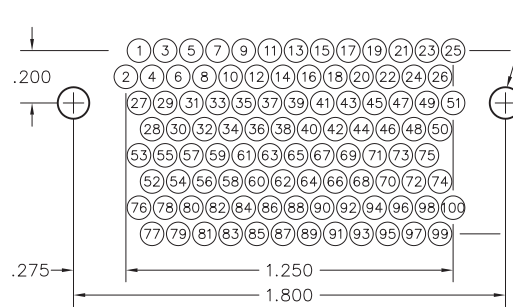
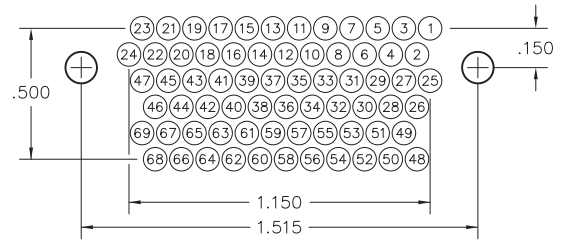
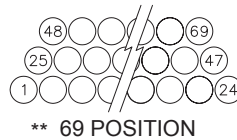
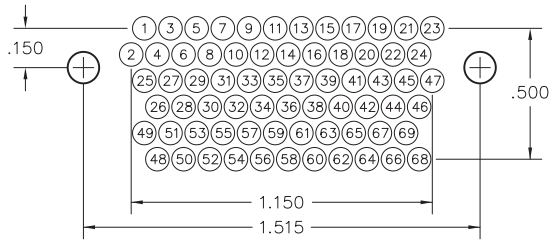
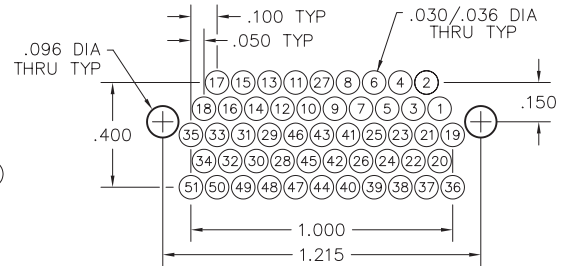
PLUG
PC BOARD LAYOUT
COMPONENT SIDE



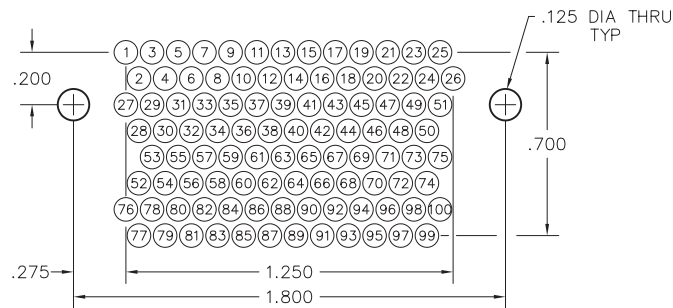
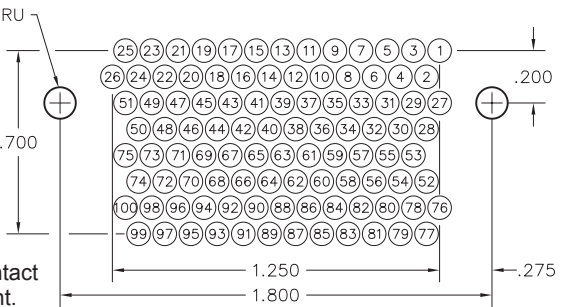
CONNECTOR
MATING FACE*
(RECEPTACLE)



RECEPTACLE
PC BOARD LAYOUT
COMPONENT SIDE



* For pin (plug) connectors, the contact numbers are reversed left to right.

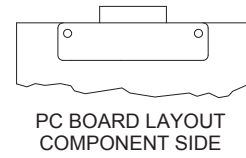
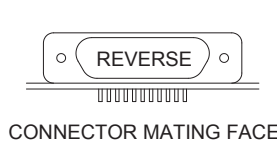


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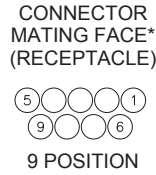
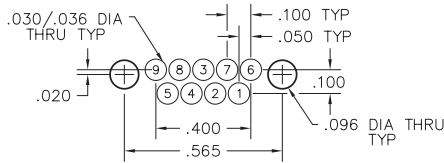
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Recommended PC Board Layout

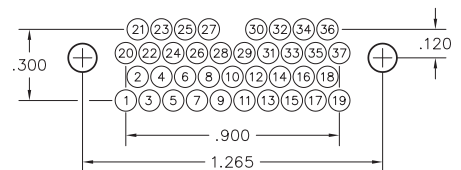
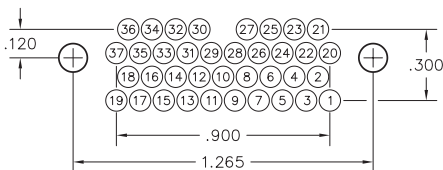
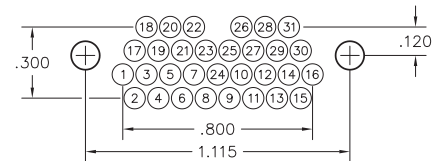
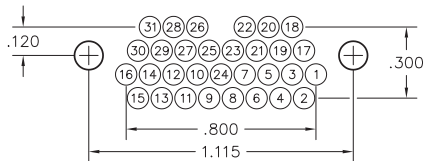
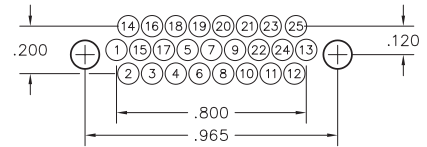
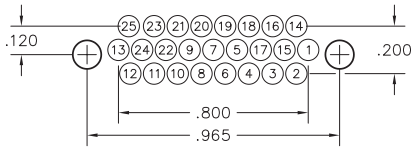
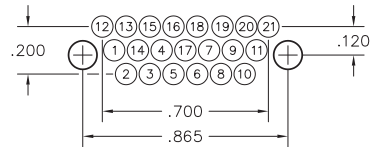
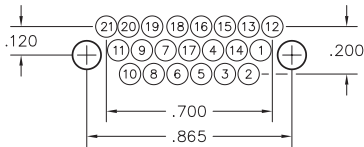
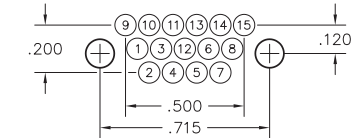
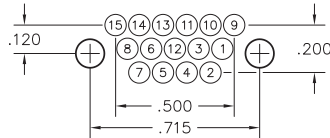
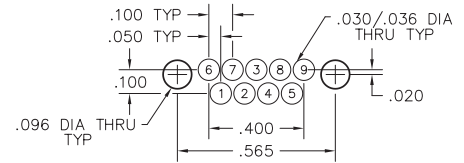
Right Angle, Narrow Footprint
Reverse Polarization



PLUG
PC BOARD LAYOUT
COMPONENT SIDE



RECEPTACLE
PC BOARD LAYOUT
COMPONENT SIDE



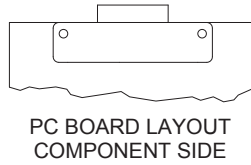
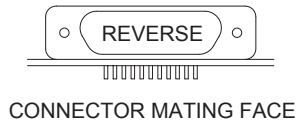
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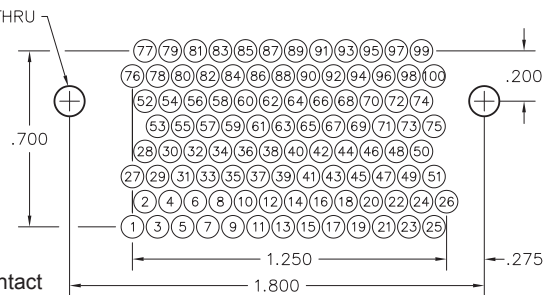
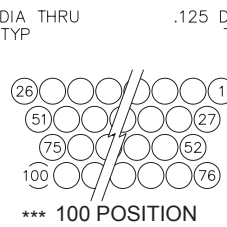
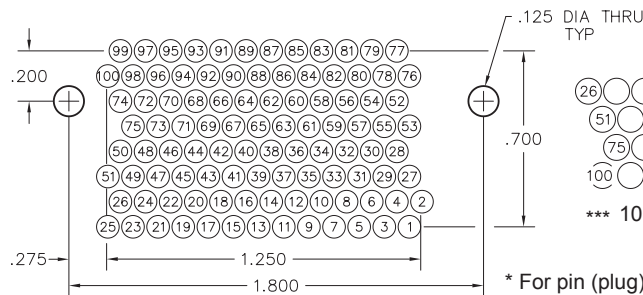
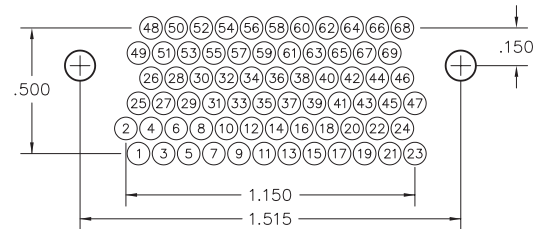
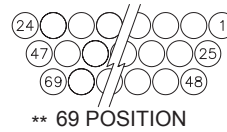
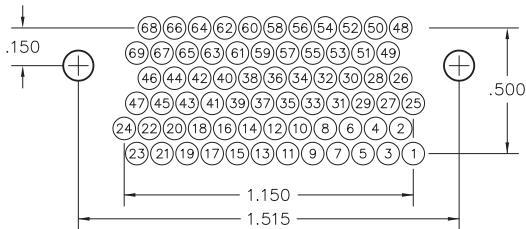
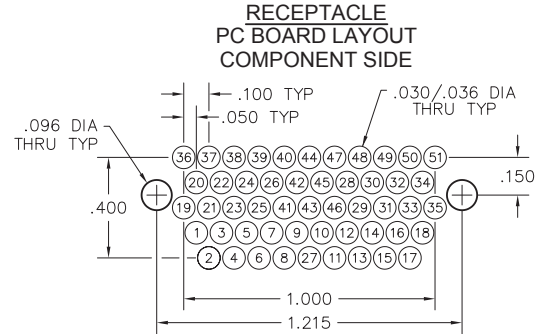
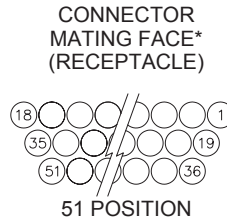
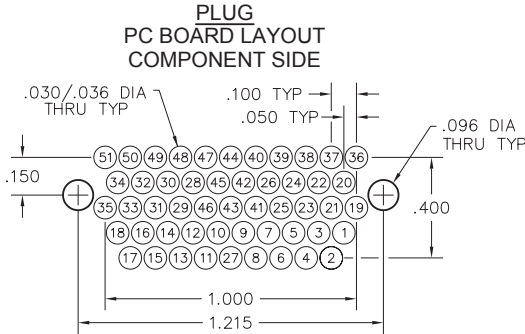
PAGE 6 OF 10 PAGES

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Recommended PC Board Layout

Right Angle, Narrow Footprint
Reverse Polarization



* For pin (plug) connectors, the contact numbers are reversed left to right.

** = 69 and 100 positions not available in low profile (MS, MR)

*** = 100 position not available in thru-cut body style (R, S)

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Mating Matrix for AirBorn "M" Series Connectors

RECEPTACLES

**P
L
U
G
S**

	MA (Strip)	MC (Circular)	MM (Hybrid)	MK (Metal) PC Board	ML (Plastic) PC Board	MM (Metal) I/O	MN (Plastic) I/O	MP (Plastic) I/O	MQ (Metal) I/O	MR (Plastic) PC Board	MS (Metal) PC Board
MA (Strip)	XX										
MC (Circular)		XX									
MM (Hybrid)			XX								
MK (Metal) PC Board				BB	BB	BI	BI				
ML (Plastic) PC Board				BB	BB	BI	BI				
MM (Metal) I/O				IB	IB	II	II				
MN (Plastic) I/O				IB	IB	II	II				
MP (Plastic) I/O								II	II	IB	IB
MQ (Metal) I/O								II	II	IB	IB
MR (Plastic) PC Board								BI	BI	BB	BB
MS (Metal) PC Board								BI	BI	BB	BB

I/O Connectors

MM-MN-MP-MQ

PC Board Mounted Connectors

MK-ML-MR-MS

Inter-mateable Connectors

MK-ML-MM-MN
MP-MQ-MR-MS

KEY:

BB = PC Board Mounted Plug with PC Board Mounted Receptacle

BI = PC Board Mounted Plug with I/O Receptacle

IB = I/O Plug with PC Board Mounted Receptacle

II = I/O Plug with I/O Receptacle

For Military Configurations, See pages MIL-1 thru MIL-22

— CLICK HERE —

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Specifications

Materials and Finishes *

Contacts:	Pins: BeCu alloy strip per ASTM B194 Sockets: Brass per ASTM B121 / B121M or ASTM B16 / B16M or ASTM B453
Contact Finish:**	Gold plate per ASTM B488
Shells:	Aluminum Alloy 6061-T6 per SAE AMS-QQ-A-250/11 or 6061-T6511 per SAE AMS-QQ-A-200/8 or Stainless Steel 300 series per ASTM A484 / A484M and ASTM A582 / A582M Passivated per SAE AMS2700
Aluminum Shell Finishes:**	Electroless Nickel per SAE AMS2404 Electrodeposited Cadmium per SAE AMS-QQ-P-416 Black Anodized per MIL-A-8625 Gold per MIL-DTL-45204
Molded Insulators:	Glass filled polyphenylene sulfide per MIL-M-24519
Embedment:	Insulating compound per MIL-I-16923
Jackscrews, Jackposts and Nuts:	Corrosion resistant steel per ASTM A320 or ASTM A484 / A484M and ASTM A582 / A582M Passivated per SAE AMS2700
Clips and Washers:	Corrosion resistant steel per ASME 18.24 or NASM35333 Passivated per ASME 18.24 or NASM35333
Guide Pins	Corrosion resistant steel per ASTM A484 / A484M and ASTM A582 / A582M Passivated per SAE AMS2700
Latches	Beryllium copper in accordance with ASTM B194 Electroless Nickel plate per SAE AMS2404
Interfacial Seal Gaskets:	Fluorosilicone per SAE AMS-R-25988
Tolerances:**	Unless otherwise specified: Fractions = $\pm 1/64$ " Decimals = ± 0.010 " Angles = $\pm 5^\circ$ Wire lengths: insulated/stranded = $+1.0"/-0.0$ " uninsulated/solid = $+0.2"/-0.0$ "

Note: AirBorn can manufacture special configurations for your exact specifications.

* = Reference the above listed specifications or an equivalent industry standard when applicable

** = When ordering to Mil Spec P/N, Mil Spec requirements apply

Performance

Reference MIL-DTL-83513

AirBorn "M" Series meets or exceeds MIL-DTL-83513 Performance Specifications

Contact Rating:	3-amperes maximum
Solderability:	Terminals (except crimp) tested in accordance with MIL-STD-202, Method 208
Wire Size:	Stranded #26 AWG or solid #25 AWG standard (consult factory for other sizes and types)
Test Voltage:	600 V, RMS, 60 Hz
Operating Temperature:	-55° C to +125° C
Insulation Resistance:	5,000 megohms minimum @ 500 VDC
Durability:	500 connector mating cycles
Vibration:	Tested in accordance with MIL-STD-1344, Method 2005, Condition IV, according to MIL-83513
Shock:	Tested in accordance with MIL-STD-1344, Method 2004, Condition E, according to MIL-83513
Salt Spray:	Mated connectors tested in accordance with MIL-STD-1344, Method 1001, Test Condition B
Humidity:	Mated connectors tested in accordance with MIL-STD-1344, Method 1002, Type II (except steps 7a and 7b)
Thermal Shock:	Tested to the temperature extremes of MIL-STD-1344, Method 1003, Test Condition A (except step 3, temperature shall be 125° C)
Contact Resistance:	0.065 volt maximum drop @ 2.5 amps (.026 ohms)
Contact Engaging Force:	6.0 ounce maximum, with .0221 diameter test sleeve per contact
Contact Separating Force:	0.5 ounce minimum, with .0230 diameter test sleeve per contact
Crimp Strength:	5 pound minimum tensile strength
Mating & Unmating Force:	10 ounces maximum per contact