

**PLUG:** MM-212-031-161-41WA  
**RECEPTACLE:** MM-222-031-2G3-4500  
**PLUG:** MN-211-031-161-41WA  
**RECEPTACLE:** MN-221-031-2G3-4500  
 XX-XXX-XXX-XXX-XXXX-XXX

PLUG		RECEPTACLE	
SERIES		SERIES	
MM .050" Rugged Metal I/O Connector		MM .050" Rugged Metal I/O Connector	
MN .050" Rugged Plastic I/O Connector		MN .050" Rugged Plastic I/O Connector	
(MM & MN mate with MK, ML, MM, MN receptacles)		(MM & MN mate with MK, ML, MM, MN plugs)	
BODY		BODY	
2 2-Row (Sizes 9 thru 51****)		2 2-Row (Sizes 9 thru 51****)	
3 3-Row (Size 51 & 69****)		3 3-Row (Size 51 & 69****)	
4 4-Row (Size 100)		4 4-Row (Size 100)	
BODY STYLE:		BODY STYLE:	
1 Plug, straight, with ears		2 Receptacle, straight, with ears	
BODY MATERIAL:		BODY MATERIAL:	
1 Polyphenylene Sulfide (MN only)		1 Polyphenylene Sulfide (MN only)	
2 Polyphenylene Sulfide with electroless nickel shell		2 Polyphenylene Sulfide with electroless nickel shell	
3 Polyphenylene Sulfide with electrodeposited cadmium shell <input checked="" type="checkbox"/>		3 Polyphenylene Sulfide with electrodeposited cadmium shell <input checked="" type="checkbox"/>	
4 Polyphenylene Sulfide with hard anodized black shell		4 Polyphenylene Sulfide with hard anodized black shell	
5 Polyphenylene Sulfide with stainless steel shell		5 Polyphenylene Sulfide with stainless steel shell	
SIZE		SIZE	
XXX 009, 015, 021, 025, 031, 037, 051****, 069****, 100		XXX 009, 015, 021, 025, 031, 037, 051****, 069****, 100	
CONTACTS		CONTACTS	
TYPE CONTACTS/TERMINATIONS:		TYPE CONTACTS/TERMINATIONS:	
11 Pin, straight, 26 awg solder cup		21 Socket, straight, 26 awg solder cup	
1A Pin, straight, 24 awg solder cup		2A Socket, straight, 24 awg solder cup	
1D Pin, straight, .109" Lead Length (.018 dia) SEE NOTE 1		2D Socket, straight, .109" Lead Length (.018 dia)	
1E Pin, straight, .125" Lead Length (.018 dia) SEE NOTE 1		2E Socket, straight, .125" Lead Length (.018 dia)	
1F Pin, straight, .140" Lead Length (.018 dia) SEE NOTE 1		2F Socket, straight, .140" Lead Length (.018 dia)	
12 Pin, straight, .150" Lead Length (.018 dia) SEE NOTE 1		22 Socket, straight, .150" Lead Length (.018 dia)	
1G Pin, straight, .156" Lead Length (.018 dia) SEE NOTE 1		2G Socket, straight, .156" Lead Length (.018 dia)	
1H Pin, straight, .172" Lead Length (.018 dia) SEE NOTE 1		2H Socket, straight, .172" Lead Length (.018 dia)	
1J Pin, straight, .187" Lead Length (.018 dia) SEE NOTE 1		2J Socket, straight, .187" Lead Length (.018 dia)	
13 Pin, straight, .250" Lead Length (.018 dia) SEE NOTE 1		23 Socket, straight, .250" Lead Length (.018 dia)	
1K Pin, straight, .375" Lead Length (.018 dia) SEE NOTE 1		2K Socket, straight, .375" Lead Length (.018 dia)	
14 Pin, straight, .500" Lead Length (.018 dia) SEE NOTE 1		2L Socket, straight, .500" Lead Length (.018 dia)	
15 Pin, straight, 1.000" Lead Length (.018 dia) SEE NOTE 1		2M Socket, straight, 1.000" Lead Length (.018 dia)	
16 Pin, straight, crimped wire		24 Socket, straight, .500" Lead Length (.018 dia) SEE NOTE 1	
		25 Socket, straight, 1.000" Lead Length (.018 dia) SEE NOTE 1	
		26 Socket, straight, crimped wire	
PLATING OPTIONS:		PLATING OPTIONS:	
1 50 µ" Au contacts (crimp wire)		1 50 µ" Au contacts (crimp wire)	
3 50 µ" Au contacts (solder cup, pigtail)		3 50 µ" Au contacts (solder cup, pigtail)	
5 50 µ" Au contacts; Sn/Pb alloy terminations <input checked="" type="checkbox"/>		5 50 µ" Au contacts; Sn/Pb alloy terminations <input checked="" type="checkbox"/>	
7 50 µ" Au contacts; SAC305 terminations		7 50 µ" Au contacts; SAC305 terminations	
HARDWARE		HARDWARE	
STYLE OF HARDWARE:		STYLE OF HARDWARE:	
00 None		00 None	
22 Two fixed jacknut assemblies (62*)		22 Two fixed jacknut assemblies (62*)	
41 Two turning jackscrews, allen head, retaining ring (81*)		41 Two turning jackscrews, allen head, retaining ring (81*)	
42 Two long turning jackscrews, allen head, retaining ring (82*)		42 Two long turning jackscrews, allen head, retaining ring (82*)	
43 Two turning jackscrews, slot head, retaining ring (83*)		43 Two turning jackscrews, slot head, retaining ring (83*)	
44 Two long turning jackscrews, slot head, retaining ring (84*)		44 Two long turning jackscrews, slot head, retaining ring (84*)	
45 Two turning jackscrews, allen head, captivated** (85*)		45 Two turning jackscrews, allen head, captivated** (85*)	
99 Keying hardware, see options below. (Body material 2, 3 and 4 only)		99 Keying hardware, see options below. (Body material 2, 3 and 4 only)	
POLARIZATION / WIRING		POLARIZATION / WIRING	
00 None		00 None	
XX For wiring codes, see page MA-3 & MA-4		XX For wiring codes, see page MA-3 & MA-4	
OPTIONS		OPTIONS	
KSXX Two turning jackscrews. See page MA-6 for keying options (KJ*)		KSXX Two turning jackscrews and interfacial sealing gasket. See page MA-6 for keying options (KJ*)	
KPXX Two fixed jacknuts. See page MA-6 for keying options (KN*)		KPXX Two fixed jacknuts and interfacial sealing gasket. See page MA-6 for keying options (KN*)	
		900 Interfacial sealing gasket	

\* = Use numbers or letters in parenthesis when ordering size 100.

\*\* = Captive hardware is factory installed and non-removable.

\*\*\* = 69 position connectors are available in metal only.

\*\*\*\* = 2 row, 51 position connectors are available in metal only (non Mil-Spec interface).

☒ = Option not RoHS compliant

NOTE 1 = The leads on these contacts are soft copper suitable for forming.