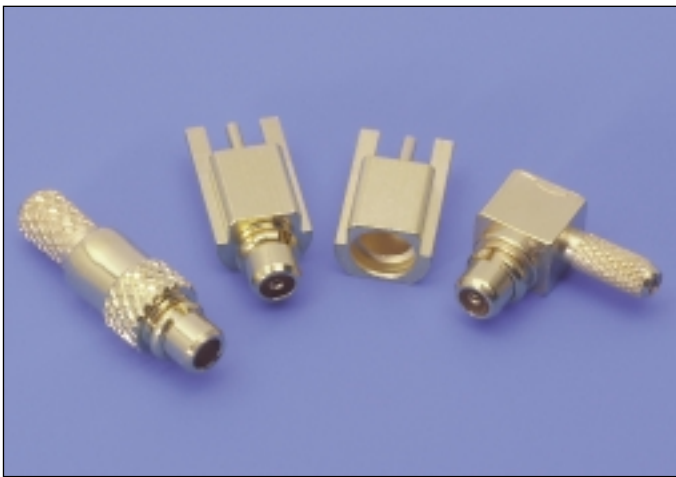


MMCX REVERSE POLARITY



MMCX Reverse Polarity Micromate Connectors

Amphenol introduces new 50 Ohm reverse polarity MMCX connector series. These micromate snap-on connectors provide excellent RF performance for applications up to 6 GHz.

These microminiature connectors are designed for use in spread spectrum wireless applications when a non-standard interface has been mandated to comply with the requirements of FCC regulation part 15, section 15.203. These

reverse polarity MMCX connectors meet the same high quality requirements as the standard Amphenol MMCX products.

The product line consists of straight and right angle plugs for various miniature flexible cables including .085 semi-rigid cable. The RP-MMCX line also includes edgcard plugs and jacks ideally suited for PCMCIA cards.

Applications:

- PCMCIA Cards
- Wireless Applications
- Antennas
- Wireless LANs
- Broadband Communications
- Instrumentation
- RF Test Ports
- Cellular Telephones
- Global Positioning Systems (GPS)
- Base Stations
- Radio Boards
- Satellite Reception Terminals

Features	Benefits
Broadband performance with low reflection DC to 6 GHz	Low cost combined with high quality
Non-standard interface	Complies with FCC regulation part 15 sec. 15.203
Capable of 500+ mating cycles	Machined components provide durability vs. stamped components
Edgcard connectors available in single or tape & reel pkg.	Tape & reel allows automated placement
Right angle plug has a one-piece body construction	Provides low cost solution with improved electrical performance

MMCX REVERSE POLARITY CONNECTORS

Specifications:

Electrical:

	CECC22000	Test Requirement
Impedance		50Ω
Frequency Range		DC thru 6 GHz
VSWR	4.4.1	
SMT and Edgecard (Mated Pair)		1.15 Max
DC-4 GHz		1.40 Max
4-6 GHz		
Cabled		
Straight, Semi-rigid		1.15 Max
Straight, Flex		1.20 Max
Rt. Angle, Semi-rigid		1.20 Max
Rt. Angle, Flex		1.25 Max
Dielectric Withstanding Voltage (at sea level)	4.4.5	500 VRMS, 50 Hz
Working Voltage (at sea level)	4.4.4	≤170 VRMS, 50 Hz
Insulation Resistance	4.4.4	≥500MΩ
Contact Resistance		
Center Conductor	4.4.2	≤10MΩ
Outer Conductor	4.4.3	≤5MΩ

Environmental:

	CECC22000	Test Requirement
Temperature Range		-55°C through 155°C
Temperature Shock	4.6.7	MIL-STD-202 method 107
Humidity	4.6.6	MIL-STD-202 method 103 Condition B
Vibration	4.6.3	3 cycles, 3 opposite directions 10-150 Hz, 10-60 Hz: 0.75mm/.030.0 in., 60-150 Hz 10G's
Mechanical Shock	4.6.4	MIL-STD-202 method 213, Condition B

Mechanical:

	CECC22000	Test Requirement
Engagement Force	4.5.4	≤3.4 lbs.
Disengagement Force	4.5.4	≥1.4 lbs. to 3.4 lbs.
Contact captivation	4.5.2	≥2.3 lbs.
Durability (machined)	4.7.1	500 cycles.

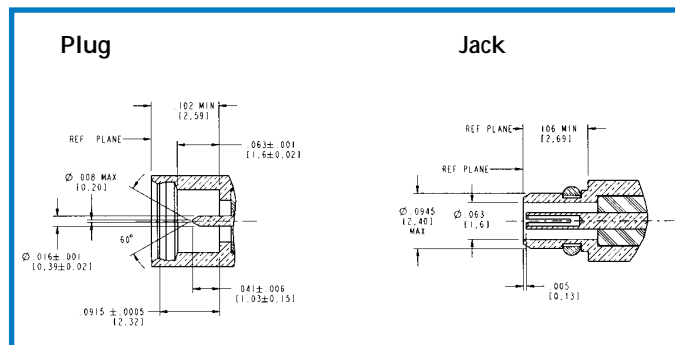
Material:

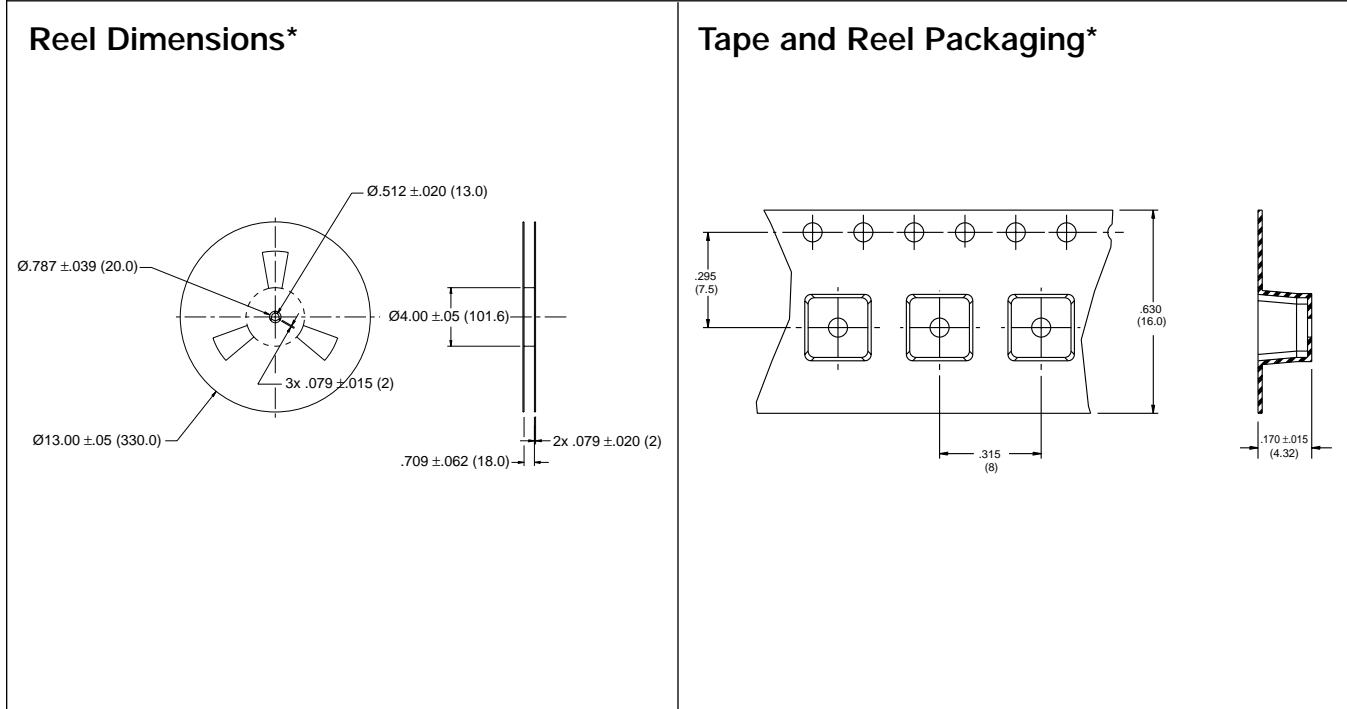
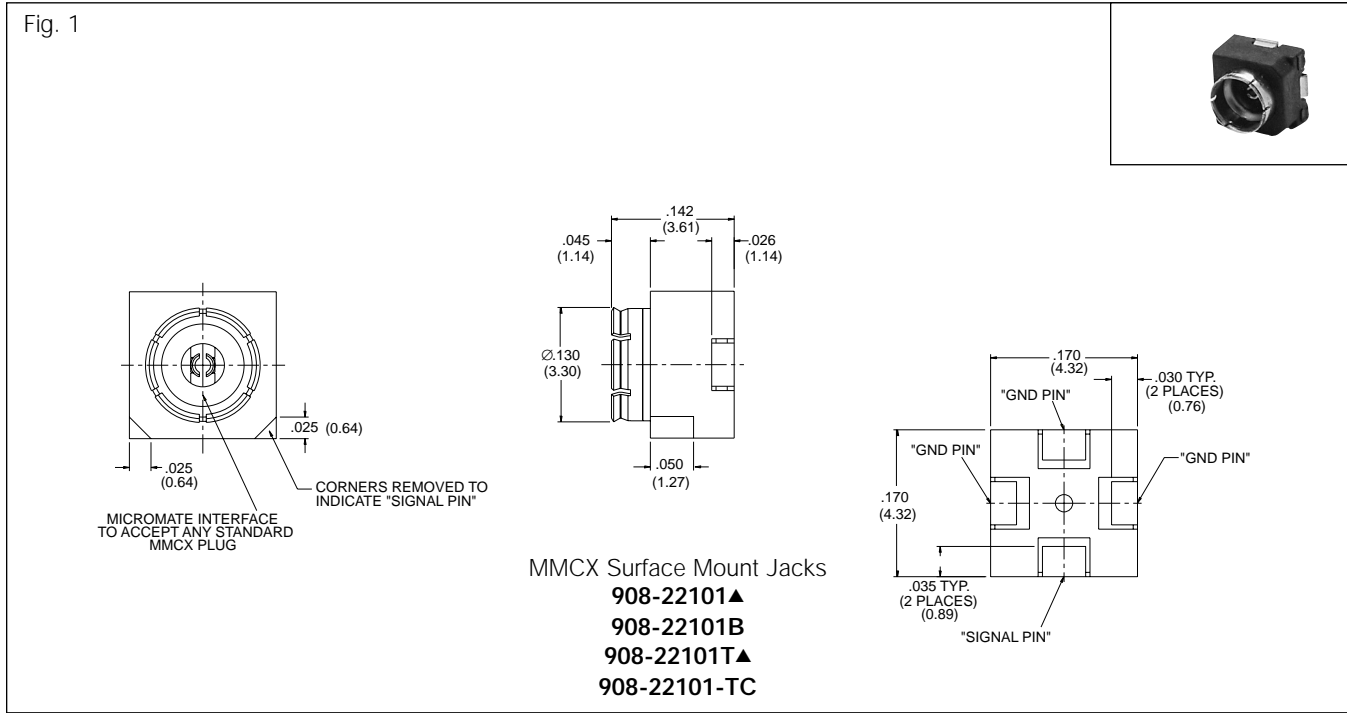
Connector Part	Standards	Material	Plating
Male contact	QQ-C-530	Brass	Gold
Female contact	QQ-C-530	BeCu	Gold
Outer Conductor	QQ-C-530	Brass	Gold
Insulator	ASTM-D1457	PTFE	—

Ordering Information:

Part No.	Cable Size	Description
908-21100-RP	n/a	Edgecard Plug
908-21102-RP	n/a	Edgecard Plug, Offset
908-22100-RP	n/a	Edgecard Jack
908-22103-RP	n/a	Edgecard Jack, Offset
908-41200-RP	RG 178,196	Straight Plug
908-41300-RP	RG 174,188,316	Straight Plug
908-41400-RP	RG 405 (.086)	Straight Plug
908-41500-RP	RD-316	Straight Plug
908-43200-RP	RG 178,196	Right Angle Plug
908-43300-RP	RG 174,188,316	Right Angle Plug
908-43400-RP	RG 405 (.086)	Right Angle Plug
908-43500-RP	RD-316	Right Angle Plug

MMCX Reverse Polarity Interface Specifications



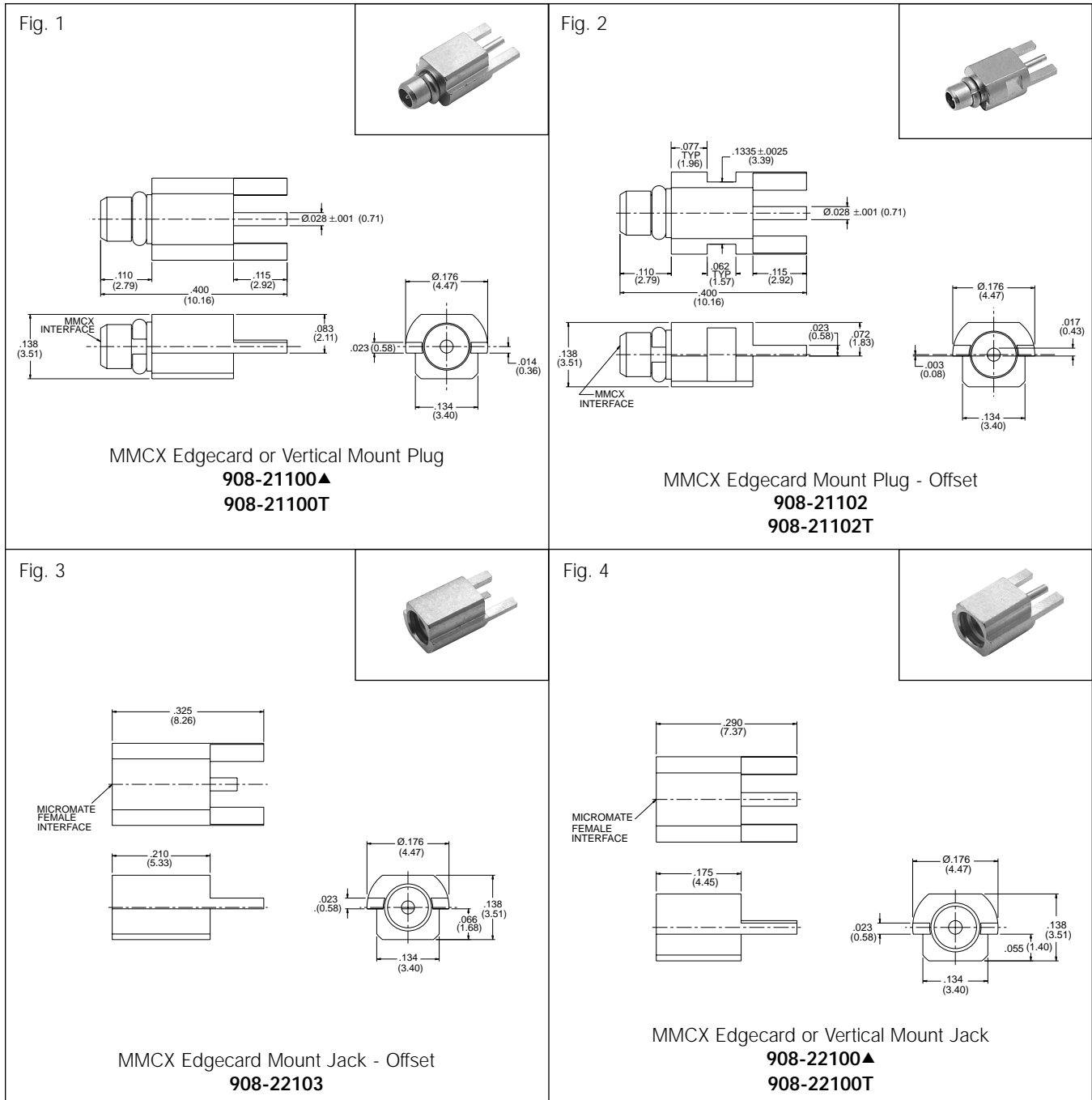


* Blister tape packaged uniformly for vertical mounting and supplied in accordance with IEC 286-3/EIA 481

MicroMate™ (MMCX) SURFACE MOUNTS

Description	Plt.	Ins.	Contact & Body	Mtg. Patterns/Page No.	Amphenol Number	Fig.
SMT Jack, Single Packed	P11	L1	Stamped Beryllium Copper	Fig. M3/8 or M4/8	▲ 908-22101	1
SMT Jack, Bulk Packed	P11	L1	Stamped Beryllium Copper	Fig. M3/8 or M4/8	908-22101B	1
SMT Jack, Tape & Reel	P11	L1	Stamped Beryllium Copper	Fig. M3/8 or M4/8	▲ 908-22101T	1
SMT Jack, Tape & Reel w/cap	P11	L1	Stamped Beryllium Copper	Fig. M3/8 or M4/8	908-22101-TC	1

▲ Distributor Stocked

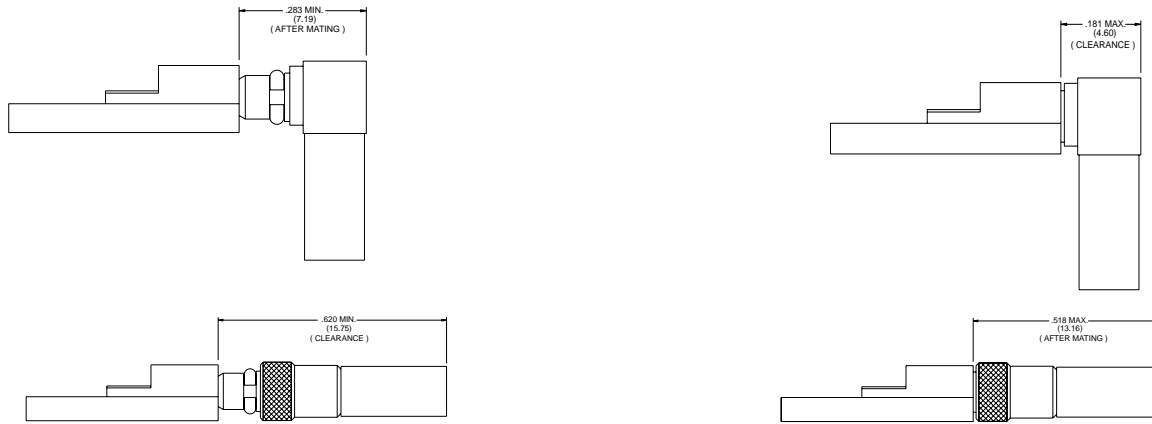


MicroMate™ (MMCX) EDGE CARD AND PCB MOUNTS

Description	Plt.	Ins.	Contact	Mtg. Patterns/Page No.	Construction Notes	Amphenol Number	Fig.
Edgcard Plug	P11	D1	Brass	Fig. M2/10 & M5/10	Machined	▲ 908-21100	1
Edgcard Plug, Tape & Reel	P11	D1	Brass	Fig. M2/10 & M5/10	Machined	908-21100T	1
Edgcard Plug, Offset	P11	D1	Brass	Fig. M5/10	Machined	908-21102	2
Edgcard Plug, Offset, Tape & Reel	P11	D1	Brass	Fig. M5/10	Machined	908-21102T	2
Edgcard Jack	P11	D1	BeCu	Fig. M2/10 & M5/10	Machined	▲ 908-22100	4
Edgcard Jack, Tape & Reel	P11	D1	BeCu	Fig. M5/10	Machined	908-22100T	4
Edgcard Jack - Offset	P11	D1	BeCu	Fig. M5/10	Machined	908-22103	3

▲ Distributor Stocked

Dimensions for Clearance and Mated Height



Pick and Place Automation

- Amphenol Edgecard Mount connectors can be assembled to PC boards with state of the art pick and place equipment.
 - Connector pick-up by suction tip

Application Notes

- Avoid radial forces from the cable of the mating connector to the surface mount connector
- Secure the cable sufficiently
- Apply only axial forces during mating and de-mating

Mounting Patterns

Fig. M1

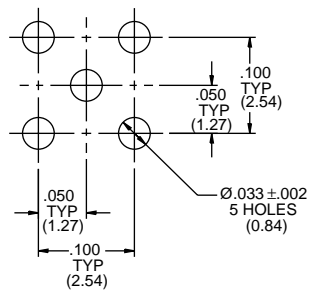
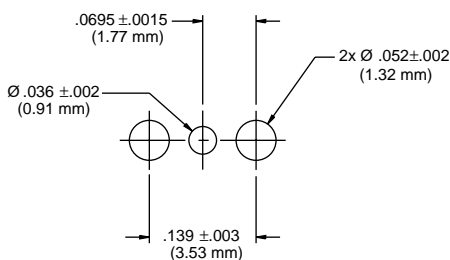
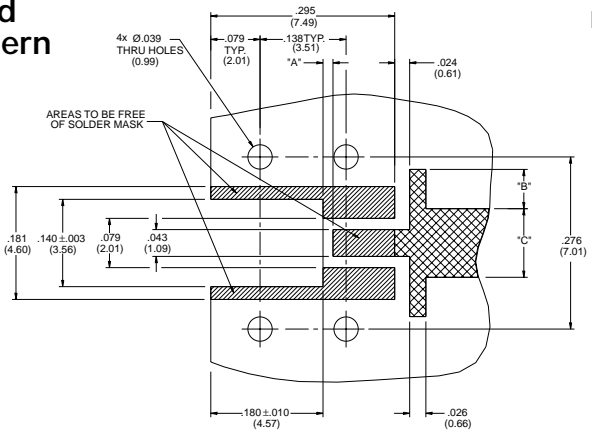


Fig. M2



Recommended Mounting Pattern

Fig. M5



Thickness (FR 4, Er=4.6)	"A"	"B"	"C"
.031 (0.79)	.039 (0.99)	-	.055 (1.40)
.039 (0.99)	.035 (0.89)	.012 (0.30)	.071 (1.80)
.063 (1.60)	.016 (0.41)	.063 (1.60)	.110 (2.79)

MicroMate (MMCX) product is compatible with the following soldering methods.

- Infrared Soldering (Max 260°C/500°F)
- Vapor Phase Soldering (215°C/419°F)
- Normal Eutectic Solder Paste (63% tin, 37% lead)
- If stenciled or screened in accordance with the mounting pattern above