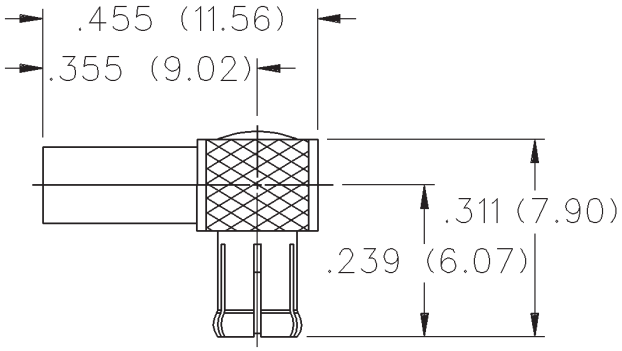
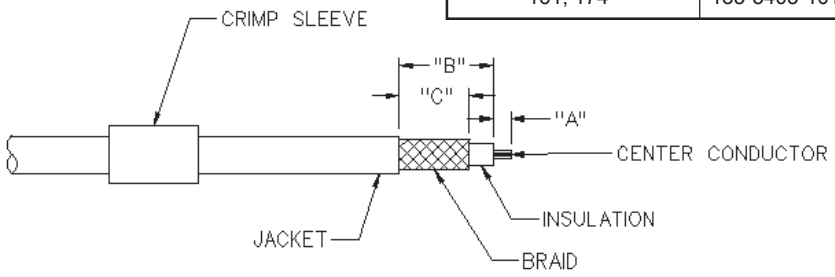
MCX Reverse Polarity Right Angle Crimp Type Plug - Captivated Contact

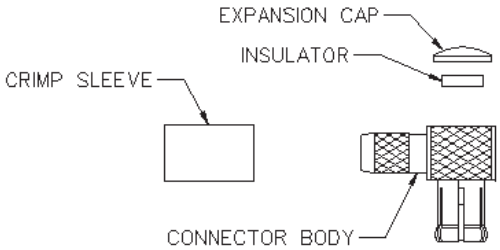
INCHES (MILLIMETERS)
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

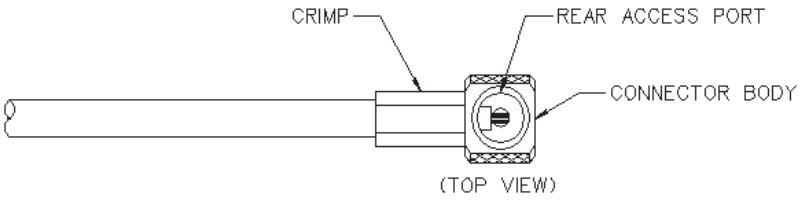


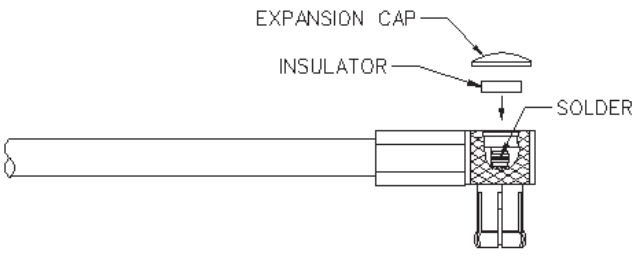
CABLE TYPE	GOLD PLATED	NICKEL PLATED
RG-316/U, 188, 161, 174	133-5403-101	133-5403-106

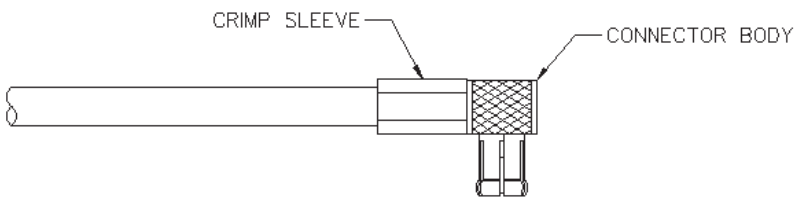
CABLE GROUP	PART NUMBER	"A"	"B"	"C"	CRIMP HEX
RG-188/u, 316, 161, 174	133-5403-101/106	.050 (1.27)	.270 (6.86)	.200 (5.08)	.128 (3.25)











1. Identify connector parts. (4 piece parts except RG-58)
2. Strip cable to dimensions shown. Do not nick braid or center conductor. A wire stripper of correct size is recommended for this step. Twist stranded center conductor into tight bundle and tin (optional). Slide crimp sleeve onto cable shown.
3. Flair braid and slide cable into body making certain that the cable insulation bottoms on center contact. Arrange braid uniformly around crimp stem. Slide crimp sleeve over braid and crimp securely using recommended crimp tool.
4. Solder center conductor to contact through rear access port. Use a minimum amount of solder for a full fillet joint. **.020 (0.51) diameter solder is recommended.**
5. Assemble insulator if applicable then place expansion cap in access port and seat with .156 (3.96) diameter flat punch or MCX hand assembly tool 141-0000-908. Shrink heat shrink tubing over crimp sleeve if applicable.

Cinch Connectivity Solutions
299 Johnson Avenue SW, Waseca, MN 56093 USA • 800.247.8256 • +1 507 833 8822 • cinchconnectivity.com

MCX Reverse Polarity - 50 Ohm

Specifications

INCHES (MILLIMETERS)
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

ELECTRICAL RATINGS

Impedance: 50 Ohms
Frequency Range: 0-6 GHz
VSWR: (f = GHz)

	Straight Cabled Connectors	Right Angle Cabled Connectors
RG-178 cable	1.17 + .04f	1.07 + .06f
RG-316 cable	1.13 + .04f	1.07 + .04f
Uncabled receptacles		N/A

Working Voltage: (Vrms maximum)

Connectors for Cable Type	Sea Level	70K Feet
RG-178	250	65
RG-316 uncabled receptacles	335	85

Dielectric Withstanding Voltage: (VRMS minimum at sea level)
- Connectors for RG-178 750
- Connectors for RG-316 uncabled receptacles 1000

Corona Level: (Volts minimum at 70,000 feet)
- Connectors for RG-178 190
- Connectors for RG-316 uncabled receptacles 250

Insertion Loss: (dB maximum, tested at 1 GHz)
- Straight cable connectors ..... 0.1 dB
- Right angle cable connectors ..... 0.2 dB
- Uncabled receptacles ..... N/A

Insulation Resistance: 10000 megohms minimum

Contact Resistance: (milliohms maximum)

	Initial	After Environmental
Center contact (straight cabled connectors, uncabled receptacles)	5.0	8.0
Center contact (right angle cabled connectors)	5.0	15.0
Outer contact	1.0	1.5
Braid to body (gold plated connectors)	1.0	N/A
Braid to body (nickel plated connectors)	2.5	N/A

RF Leakage: (dB typical tested at 2.5 GHz)
- Cable connectors ..... -55 dB
- Uncabled receptacles ..... N/A

RF High Potential Withstanding Voltage: (Vrms minimum, tested at 4 and 7 MHz)
- Connectors for RG-178 500
- Connectors for RG-316 700
- Uncabled receptacles 600

MECHANICAL RATINGS

Engagement Force: 5.6 pounds maximum axial force
Disengagement Force: 8 pounds maximum axial force, 1.0 pound min.
Contact Retention: 2.3 lbs. min. axial force (captivated contacts)
1 inch-ounce min. torque (uncabled receptacles)

Cable Retention:	Axial Force* (pounds)	Torque (in-oz)
Connectors for RG-178	10	N/A
Connectors for RG-316	20	N/A
Connectors for RG-316DS	25	N/A

* or cable breaking strength whichever is less.

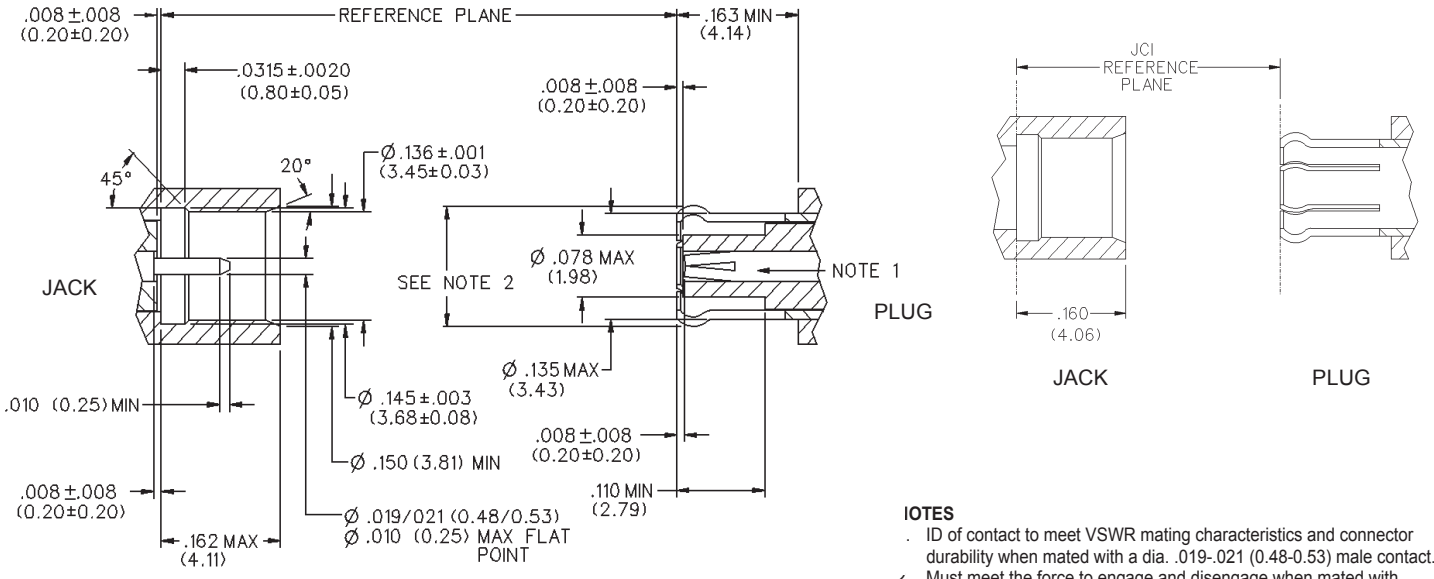
ENVIRONMENTAL RATINGS (Meets or exceed the applicable paragraph of MIL-C-39012)

Durability: 500 cycles minimum
Temperature Range: - 65°C to + 165°C
Thermal Shock: MIL-STD-202, Method 107, Condition F
Corrosion: MIL-STD-202, Method 101, Condition B
Shock: MIL-STD-202, Method 213, Condition B
Vibration: MIL-STD-202, Method 204, Condition B
Moisture Resistance: MIL-STD-202, Method 106

MATERIAL SPECIFICATIONS

Bodies: Brass per QQ-B-626 or zinc per ASTM B86-71, gold plated** per MIL-G-45204 .00001" min or nickel plated per QQ-N-290
Contacts: Male - brass per QQ-B-626, gold plated per MIL-G-45204 .00003" min.
Female - beryllium copper per QQ-C-530, gold plated per MIL-G-45204 .00003" min.
Insulators: PTFE fluorocarbon per ASTM D 1710 and ASTM D 1457
Expansion Caps: Brass per QQ-B-613, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290
Crimp Sleeves: Copper per WW-T-799, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290
Mounting Hardware: Brass (nuts) per QQ-B-626 or phosphor bronze (lockwashers) QQ-B-750, gold plated per MIL-G-45204 .00001" min. or nickel plated per QQ-N-290

MATING ENGAGEMENT FOR MCX REVERSE POLARITY SERIES PER FCC RULE 15 NON-STANDARD INTERFACE



NOTES
1. ID of contact to meet VSWR mating characteristics and connector durability when mated with a dia. .019-.021 (0.48-0.53) male contact.
2. Must meet the force to engage and disengage when mated with mating part.

†Avoid user injury due to misapplication.
See safety advisory definitions inside front cover.
** All gold plated parts include a .00005" min. nickel underplate barrier layer.

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