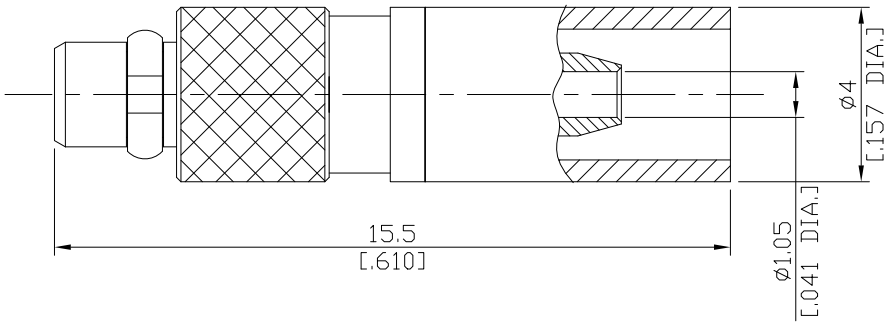
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

MMCX Plug (Male) Connector Crimp/Solder Attachment
For RD178, RG178-d DC-6GHz VSWR1.25

MMCX1C50-D178A / 11



All dimensions are in mm [inch]
Tolerances according to DIN ISO 2768-mH

Interface

According to	IEC 61169-52; CECC 22000

Electrical Data

Impedance	50 Ω
Frequency	DC to 6 GHz
VSWR (Return Loss)	≤ 1.25 (≥ 19.08 dB)
Insertion Loss	≤ 0.08 x √F (GHz) dB
Insulation Resistance	≥ 1000 MΩ
Center Contact Resistance	≤ 5 mΩ
Outer Contact Resistance	≤ 2.5 mΩ
Test Voltage	1000 V rms
Working Voltage	500 V rms

-VSWR in application depends decisive on cable assembly process-

Material And Plating

Piece Parts	Material	Plating
Centre contact	Brass	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Brass	Gold plating (Non-magnetic nickel-phosphorus underplating)
Insulator	PTFE	
Crimp ferrules	Brass	Gold plating (Non-magnetic nickel-phosphorus underplating)

Rosnol RF/Microwave Technology Co., Ltd.
www.rosnol.com; info@rosnol.com
Phone: +886-3-463-5095 / Fax: +886-3-463-5952
N-CAGE Code: SFKK0 / ISO9001 Certified

MMCX Plug (Male) Connector Crimp/Solder Attachment For RD178, RG178-d DC-6GHz VSWR1.25

MMCX1C50-D178A / 11

Mechanical Data	
Coupling Mechanisms	Snap-on
Mating Cycles	≥ 500
Engagement force	≤ 15 N
Disengagement force	6 to 15 N
Centre Contact	Soldered
Cable Entry	Crimped
Environmental Data	
Temperature Range	-65°C to +165°C
Thermal Shock	MIL-STD-202, Method 107, Condition F
Corrosion	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition C
Moisture Resistance	MIL-STD-202, Method 106
RoHS	compliant
Suitable Cables	
	RD178, RG178-d
Packing	
	Single or 100

Rosnol RF/Microwave Technology Co., Ltd.
www.rosnol.com; info@rosnol.com
Phone: +886-3-463-5095 / Fax: +886-3-463-5952
N-CAGE Code: SFKK0 / ISO9001 Certified

ROSNOL® RF/Microwave Interconnect

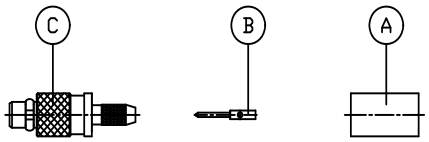
Assembly Instruction

MMCX Plug (Male) Connector Crimp/Solder Attachment For RD178, RG178-d DC-6GHz VSWR1.25

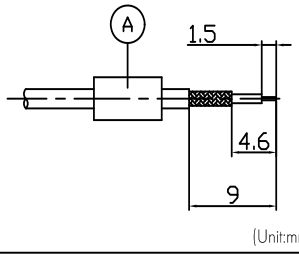
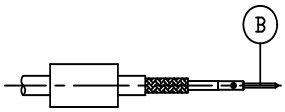
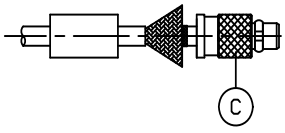
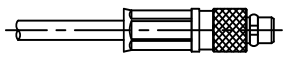
MMCX1C50-D178A / 11

Connector Type:	MMCX1C50-D178A/11	Inner Conductor Contact:	Soldered
Suitable Cable:	RD-178	Outer Conductor Contact:	Crimped

Parts List of Connector:



Assembly Steps:

Picture	Process	Attention/Check	Tools Required
	Slide ferrule A onto cable. Prepare cable according to diagram.	Do not damage braid, dielectric and inner conductor of cable.	Cable Cutter. Cable stripping blade. File.
	Flow small amount of solder into bore of contact B. Push contact B against soldering gauge and solder.	Clean contact B and cable dielectric. Remove excess solder.	Soldering iron.
	Splay out braid and insert prepared cable fully into connector body C.	Ensure that braid lies above the crimp neck.	
	Slide ferrule A over braid to body C and crimp.	Crimp as close as possible to connector body C.	Crimp Insert: CI-L3-3T1A

Rosnol RF/Microwave Technology Co., Ltd.
www.rosnol.com; info@rosnol.com
Phone: +886-3-463-5095 / Fax: +886-3-463-5952
N-CAGE Code: SFKK0 / ISO9001 Certified