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Electronics

MMCX Connector

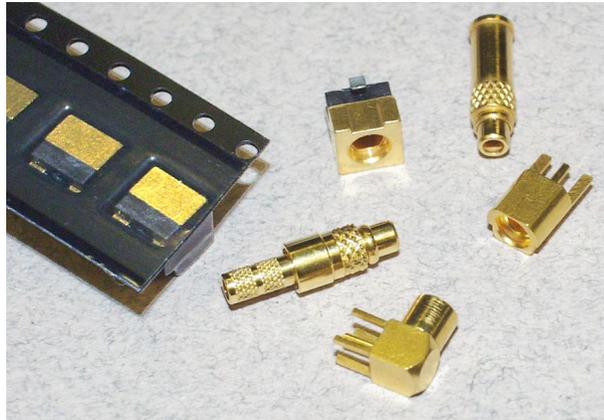
07/03 1654729

DESCRIPTION

Microminiature Snap-On Connector Series

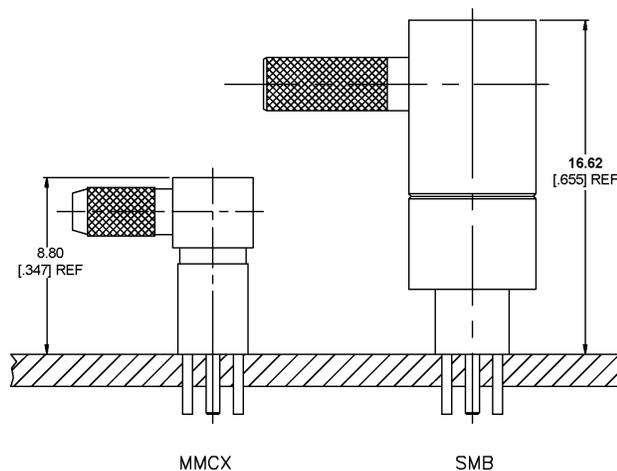
Snap-on interface facilitates assembly

- 35% smaller than MCX Series
- Designed for space saving applications up to 6 GHz
- Conforms to CECC Specifications
- Surface mount tape and reel for high volume



Tyco Electronics' microminiature snap-on connectors offer an excellent blend of size, durability and performance for emerging applications in GPS, PCS, automotive and wireless communications. An extension of the popular MCX series, MMCX connectors are 35% smaller, offering even greater packaging density and weight reduction. MMCX connectors are rated to 500 mating cycles. The snap-on interface facilitates assembly, eliminating the need for a threaded connection, and ensuring full engagement. The forces to engage and disengage have been optimised to ensure ease of mating as well as to prevent damage to PCB solder connections. MMCX connectors are designed for broadband performance, DC-6 GHz, and can be utilized for future system upgrades without concerns for performance degradation. The non-slotted outer contact provides for minimal RF leakage. MMCX surface mount connectors are designed to withstand infrared reflow, convection and vapor phase soldering.

Tyco Electronics MMCX connectors are fully mateable with competitive MMCX product and conforms to the CECC interface specifications. They are available in a broad range of standard configurations, including PCB and panel mount, flexible and semi-rigid cable. Tape and reel packaging is available on surface mount product to facilitate high volume manufacturing. Other options can be reviewed as well, including additional cable sizes, and adapters.



The MMCX connector series is a cost effective solution for the challenging demands of today's commercial marketplace. It offers one of the smallest conventional crimp terminations without special tooling. Call your local sales office or authorized distributor for additional information or samples of the MMCX connector series.

Tyco Electronics is a leading supplier of RF and Microwave connectors and cable assemblies, and provides advanced technology products from well known and industry leading brands, including AMP and M/A-COM.

New product

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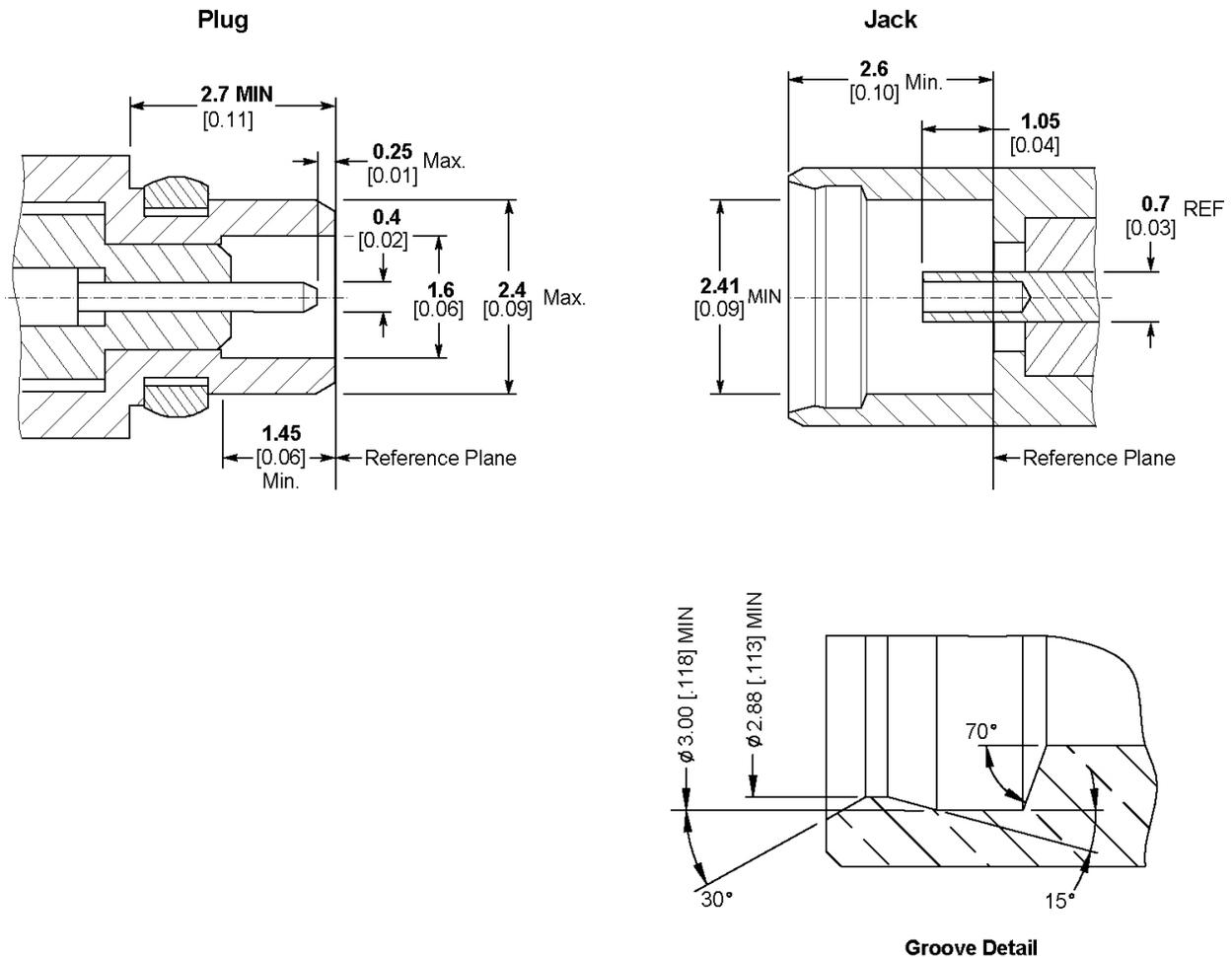
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MMCX Specifications

Requirement	Detail	
General		
Materials	Shells and Bodies:	Brass
	Center Contacts (Male):	Brass
	(Female):	Beryllium Copper
	Dielectrics:	PTFE
Finish	Bodies:	Gold
	Center Contacts:	Gold
Electrical		
	CECC 22000	
Frequency		dc – 6 GHz
Nominal Impedance		50 ohms
Voltage Rating	4.4.4	170 Volts (VRMS Maximum) @ Sea Level
VSWR	4.4.1	1.25 : 1 Maximum @ 6 GHz
Insulation Resistance	4.4.4	1,000 Megohms Minimum
Dielectric Withstanding Voltage	4.4.5	500 Volts (VRMS Maximum) @ Sea Level
RF Leakage	4.4.8	-60 dB Minimum @ 2.5 GHz
Contact Resistance		
Center Contact	4.4.2	5 milliohms maximum
Outer Contact	4.4.3	1 milliohm maximum
Mechanical		
	CECC 22000	
Connector Durability	4.7.1	500 mating cycles
Force to Engage	4.5.4	18 Newtons Maximum
Force to Disengage	4.5.4	6 Newtons Maximum
Center Contact Retention	4.5.2	10 Newtons Minimum
Cable Retention		
Axial	4.5.5	45 Newtons Minimum
Rotational	4.5.5	0.05 N-m Minimum
Environmental		
	CECC 22000	Equivalent Test Conditions
Temperature rating		-55 to +155°C
Vibration	4.6.3	MIL-STD-202, Method 204, Condition B
Shock	4.6.4	MIL-STD-202, Method 213, Condition A
Moisture Resistance	4.6.6	MIL-STD-202, Method 106
Thermal Shock	4.6.7	MIL-STD-202, Method 107, Condition B

Note: Performance specifications are typical, but may not apply to all connector types

MMCX Interface Dimensions



Dimensions are millimeters over inches unless otherwise specified

TECHNICAL DOCUMENTS

- Product Spec 108-2084

FOR MORE INFORMATION

Internet

<http://tycoelectronics.com>

Technical Support Center / AMP FAX Service
1-800-522-6752

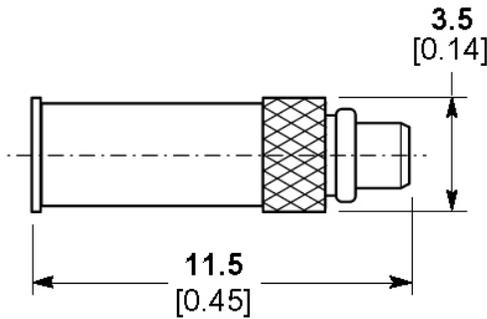
MMCX Product Offering

Semi-Rigid Cable – Direct Solder Attachment

Straight Cable Plug



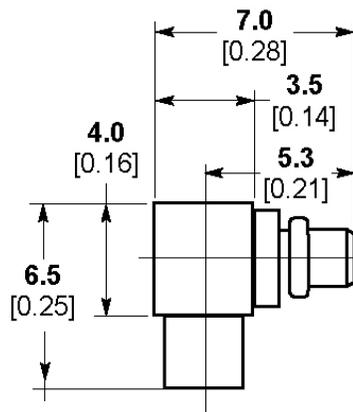
Part Number	Cable
1408313-1	RG 405



Right Angle Cable Plug



Part Number	Cable
1408314-1	RG 405



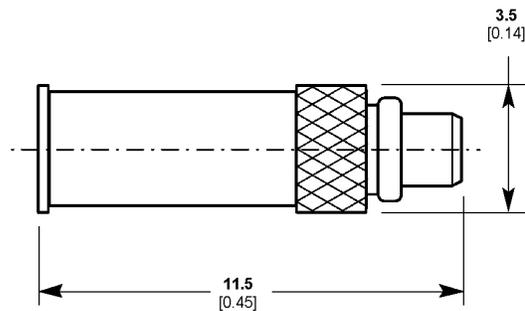
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MMCX Product Offering

Flexible Cable – Crimp Attachment

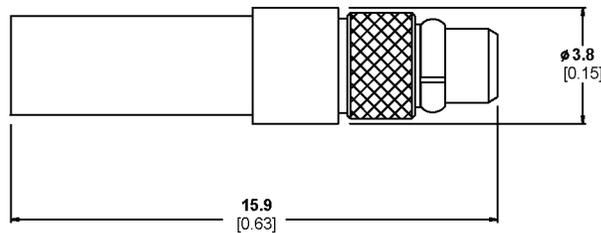
Straight Cable Plug



Part Number	Cable
1408148-1	RG 178, 196

Captured Center Contact

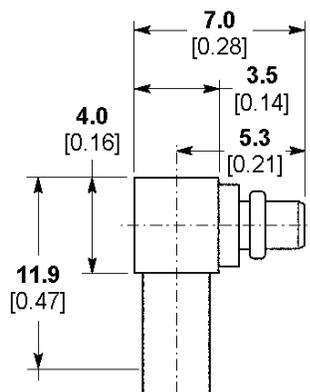
Straight Cable Plug



Part Number	Cable
1408312-1	RG 174, 188, 316
1408312-2	RD 316

Captured Center Contact

Right Angle Cable Plug



Part Number	Cable
1408149-1	RG 178, 196
1408149-2	RG 174, 188, 316
1408149-3	RD 316

Captured Center Contact

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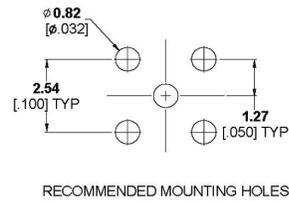
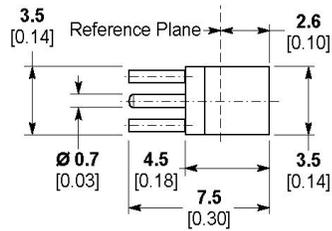
MMCX Product Offering

Printed Circuit Board

Straight Jack Receptacle



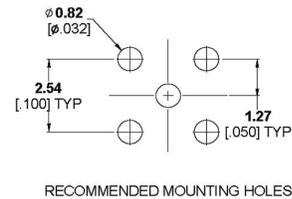
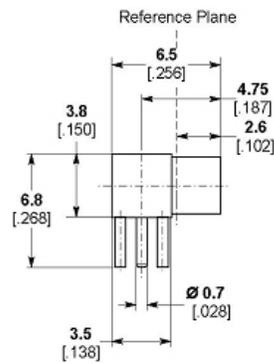
Part Number
1408150-1



Right Angle Jack Receptacle



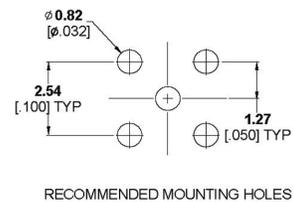
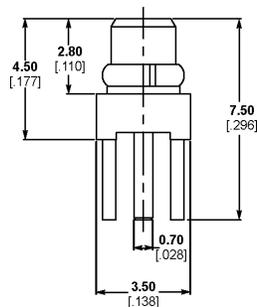
Part Number
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Straight Plug Receptacle



Part Number
1408496-1



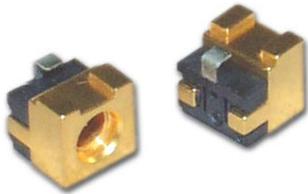
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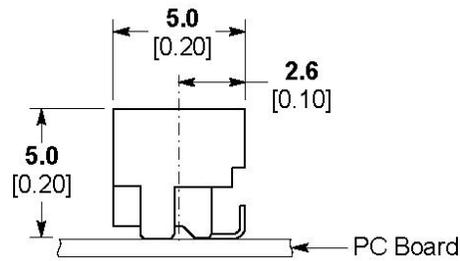
MMCX Product Offering

Surface Mount

Straight Jack Receptacle



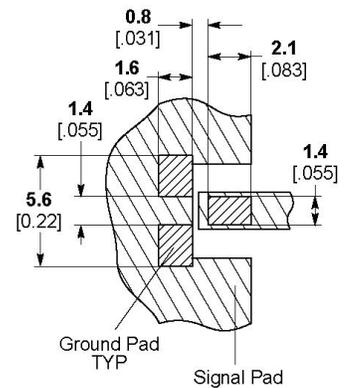
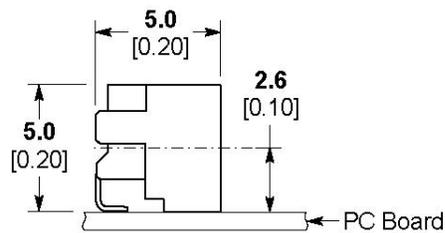
Part Number
1393757-6



Right Angle Jack Receptacle



Part Number
1393757-7



Recommended Mounting Pattern

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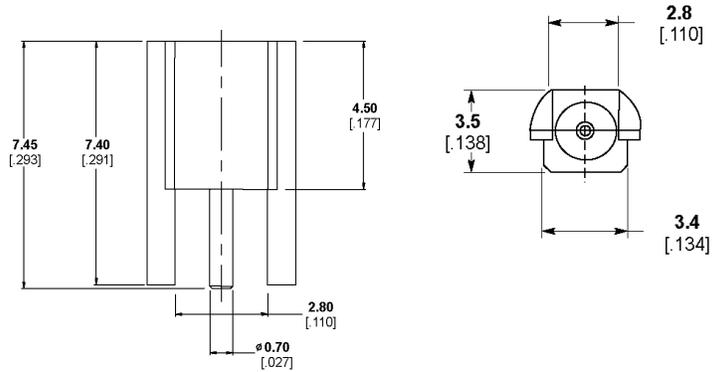
MMCX Product Offering

Edge Mount

Straight Jack Receptacle



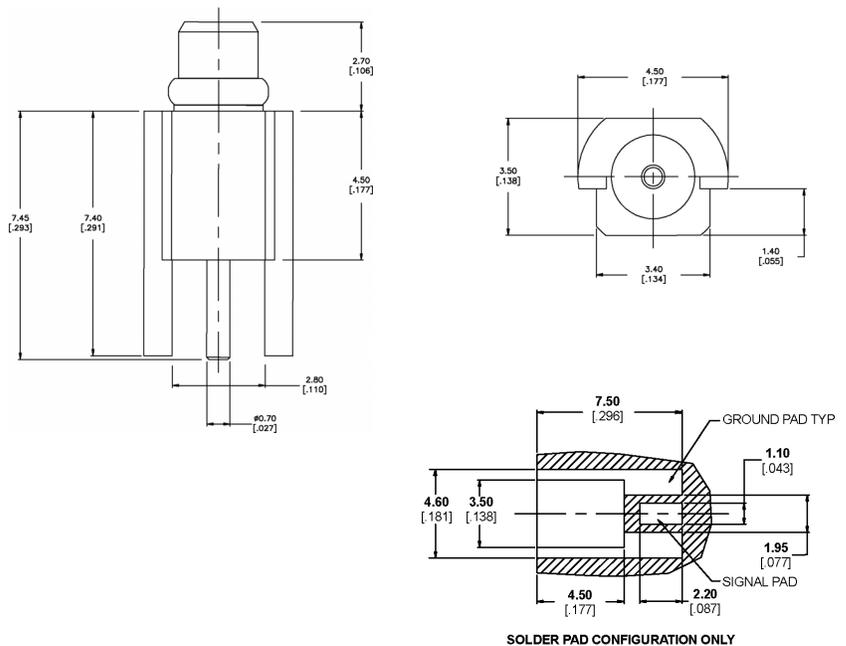
Part Number
1408152-1



Straight Plug Receptacle



Part Number
1408120-1



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