

MMCX Microminiature Snap-On Connector Series

Product Facts

- 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' micro-miniature 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 optimized 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.

Material and Finish

Shells — Brass

Bodies — Brass, plated gold

Center Contacts —

(Male) — Brass, plated gold

(Female) — Beryllium Copper, plated gold

Dielectrics — PTFE

Electrical Characteristics in accordance with CECC 22000

Frequency — dc – 6 GHz

Nominal Impedance — 50 ohms

Voltage Rating — 170 Volts (VRMS Max.) @ Sea Level

VSWR — 1.25 : 1 Max. @ 6 GHz

Insulation Resistance — 1,000 Megohms Min.

Dielectric Withstanding Voltage — 500 Volts (VRMS Max.) @ Sea Level

RF Leakage — -60 dB Min. @ 2.5 GHz

Contact Resistance —

Center Contact — 5 milliohms max.

Outer Contact — 1 milliohm max.

Mechanical Characteristics in accordance with CECC 22000

Connector Durability — 500 mating cycles

Force to Engage — 18 Newtons Max.

Force to Disengage — 6 Newtons Max.

Center Contact Retention — 10 Newtons Min.

Cable Retention —

Axial — 45 Newtons Min.

Rotational — 0.05 N-m Min.

Environmental Characteristics in accordance with CECC 22000, Equivalent Test Conditions

Temperature Rating — -55 to +155°C

Vibration — MIL-STD-202, Method 204, Condition B

Shock — MIL-STD-202, Method 213, Condition A

Moisture Resistance — MIL-STD-202, Method 106

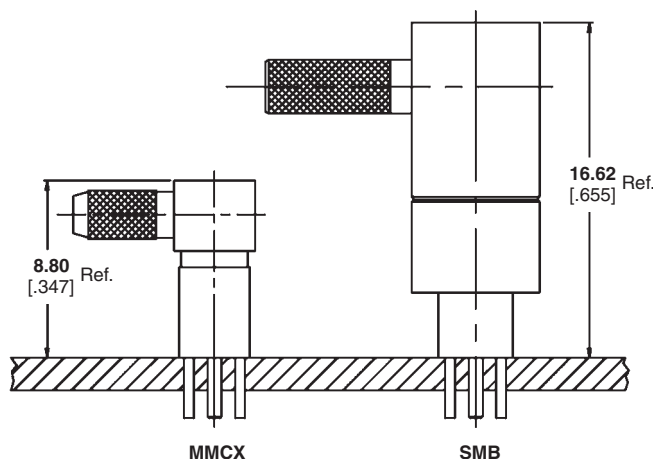
Thermal Shock — MIL-STD-202, Method 107, Condition B

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

Related Product Data

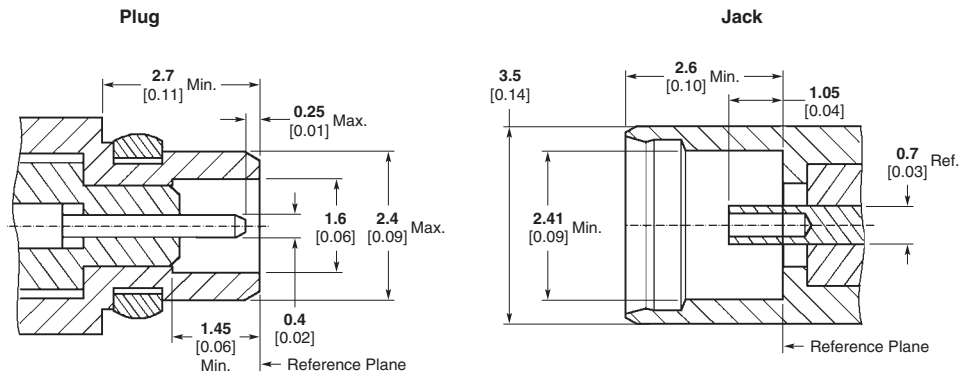
Product Specification — 108-2084

Sample Kit — 1654779

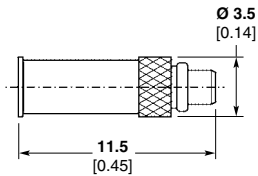


MMCX Microminiature Snap-On Connector Series (Continued)

MMCX Interface Dimensions

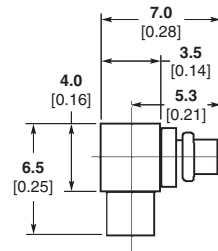


Semi-Rigid Cable – Direct Solder Attachment Straight Cable Plug



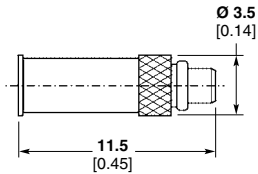
Cable	Part No.
RG 405	1408313-1

Right-Angle Cable Plug



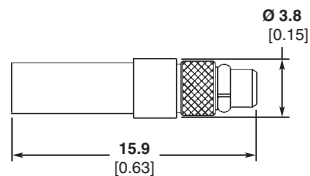
Cable	Part No.
RG 405	1408314-1

Flexible Cable – Crimp Attachment Straight Cable Plugs



Cable	Part No.
RG 178, 196	1408148-1

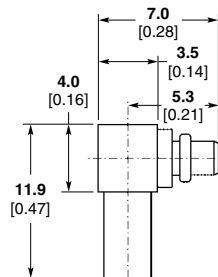
Captured Center Contact



Cable	Part No.
RG 174, 188, 316	1408312-1
RD 316	1408312-2

Captured Center Contact

Right-Angle Cable Plug



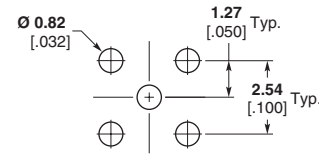
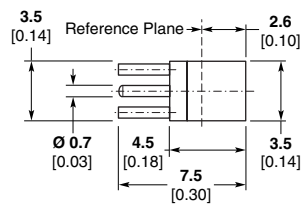
Cable	Part No.
RG 178, 196	1408149-1
RG 174, 188, 316	1408149-2
RD 316	1408149-3

Captured Center Contact

Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

MMCX Microminiature Snap-On Connector Series (Continued)

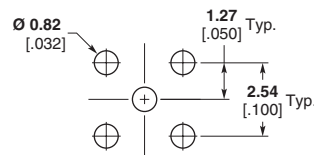
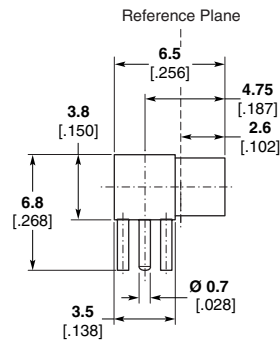
Printed Circuit Board Straight Jack Receptacle



Recommended Mounting Holes

Part No.
1408150-1

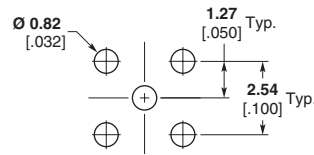
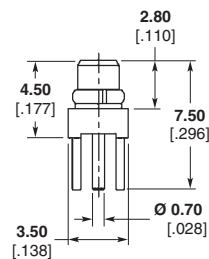
Right-Angle Jack Receptacle



Recommended Mounting Holes

Part No.
1408151-1

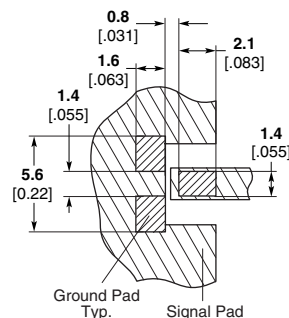
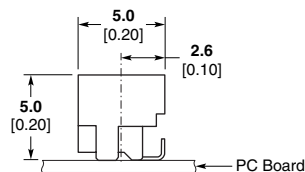
Straight Plug Receptacle



Recommended Mounting Holes

Part No.
1408496-1

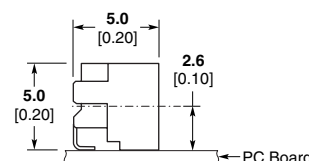
Surface Mount Straight Jack Receptacle



Recommended Mounting Pattern

Part No.
1393757-6

Right-Angle Jack Receptacle



Ground Pad Typ. Signal Pad

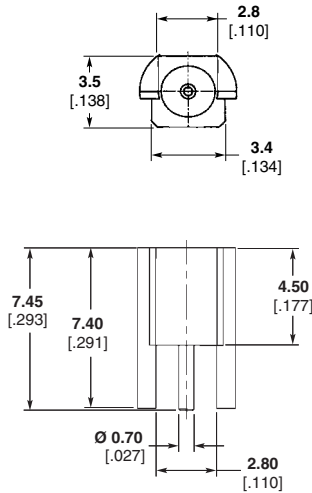
Part No.
1393757-7

Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

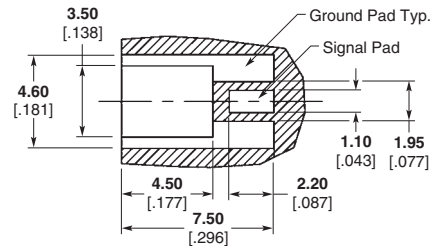
MMCX Microminiature Snap-On Connector Series (Continued)

Edge Mount

Straight Jack Receptacle

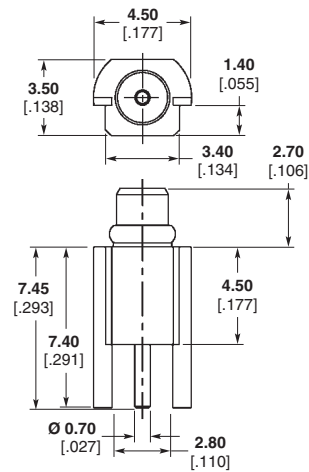


Part No.
1408152-1

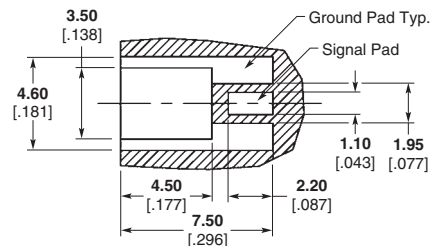


Solder Pad Configuration Only

Straight Plug Receptacle



Part No.
1408120-1



Solder Pad Configuration Only

Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.