QMA Connectors

Snap-On SMA Series of RF Connectors

Product Facts

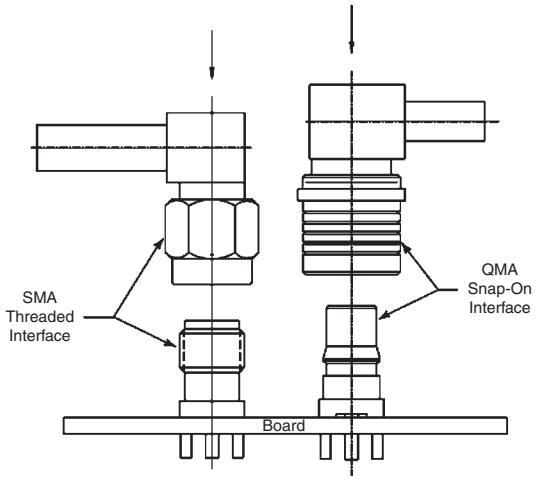
- **Positive snap-on interface facilitates assembly**
- **Intermateable with competitor product**
- **Excellent RF performance to 6 GHz**
- **Ideal for Communications and Industrial Applications**

Tyco Electronics' next generation high performance RF products QMA (Snap-On SMA) connectors series offers the same high quality and performance currently found in the standard Tyco Electronics SMA series but does not require the coupling nut torque. By integrating a snap-on feature to the design, denser packaging can be achieved, and the overall applied cost is dramatically reduced. The QMA connector series is excellent for communications as well as industrial applications. The QMA offering is designed for 100 mating cycles, operates through 6 GHz, and is completely intermateable with competitive QMA offerings. This new QMA product is not intermateable with standard SMA interfaces.

QMA connectors are available in a broad range of standard configurations, including PCB and panel mount, flexible and semi-rigid cable, and adapters. Other options can be reviewed as well, including additional cable sizes, PCB surface mounting, and tape and reel packaging.

The QMA connector series is a cost effective solution for the challenging demands of today's commercial marketplace, with applications including cellular base station, handsets, and test and measurement. Call your local sales office or authorized distributor for additional information or samples of the QMA 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.



Material and Finish

Shells and Bodies — Brass, nickel plated

Collars — Phosphor bronze, white bronze plated

Outer Contacts — Beryllium copper, nickel plated

Center Contacts — Beryllium copper, gold plated

Dielectrics — PTFE

Electrical Characteristics

Frequency — dc – 6 GHz

Nominal Impedance — 50 ohms

Voltage Rating — 335 Volts (VRMS max.) @ Sea Level

VSWR — 1.15 : 1 max. @ 6 GHz

Insulation Resistance — 5,000 megohms min.

Insertion Loss — .25 dB Max @ 6 GHz

Dielectric Withstanding Voltage — 1000 Volts (VRMS max.) @ Sea Level

Contact Resistance — Center Contact — 5 milliohms max. Outer Contact — 4 milliohms max.

Mechanical Characteristics

Connector Durability — 100 mating cycles

Force to Engage — 27 Newtons

Force to Disengage — 20 Newtons

Retention Force (mated pair) — 60 Newtons min.

Cable Retention — Dependent upon cable type

Environmental Characteristics

Temperature Rating — -40 to +125°C

Vibration — EIA-364-28, Test Condition VII, Condition D

Shock — EIA-364-27, Method H

Moisture Resistance — EIA-364-31, Method III

Thermal Shock — EIA-364-32

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

Related Product Data

Product Specifiation — 108-2087

Sample Kit — 1654882

Catalog 1307191
Revised 3-07

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-1106-0803

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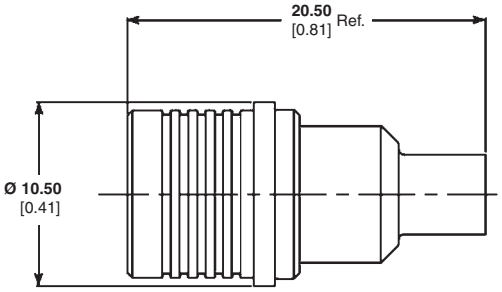
UK: 44-8706-080-208

QMA Connectors (Continued)

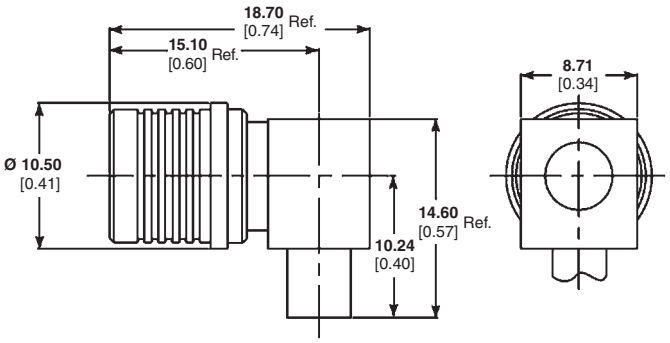
Semi-Rigid Cable — Direct Solder Attachment

Straight Cable Plug



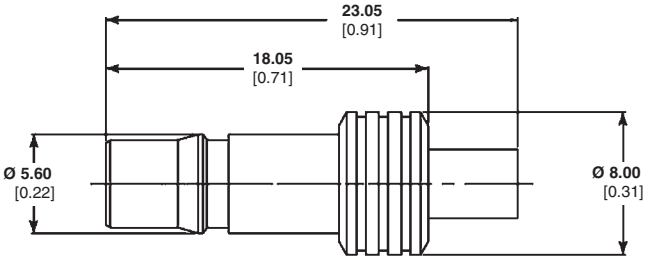
Cable	Part Number
RG 402	1408346-1

Right-Angle Cable Plug



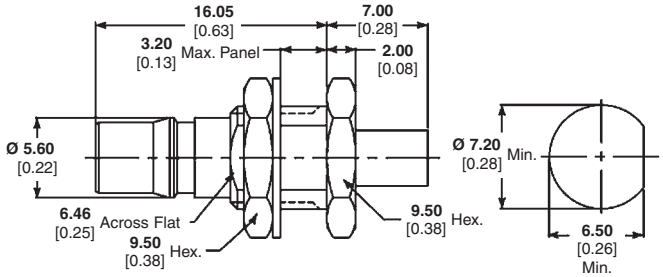
Cable	Part Number
RG 402	1408347-1

Straight Cable Jack



Cable	Part Number
RG 402	1408348-1

Bulkhead Cable Jack



Recommended Mounting Hole

Cable	Part Number
RG 402	1408349-1

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

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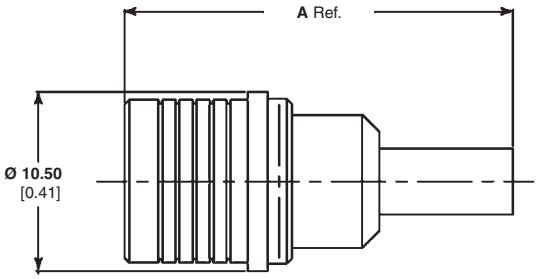
QMA Connectors (Continued)

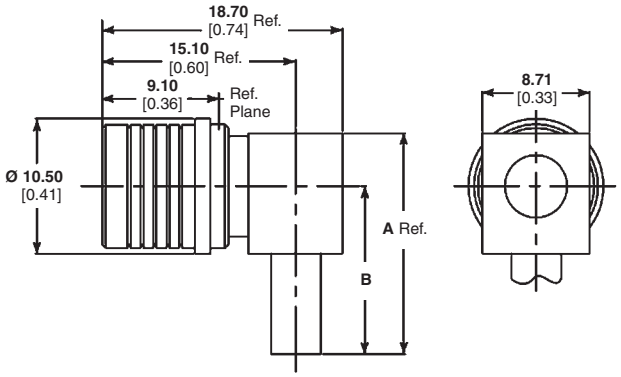
Flexible Cable — Crimp Attachment

Straight Cable Plug



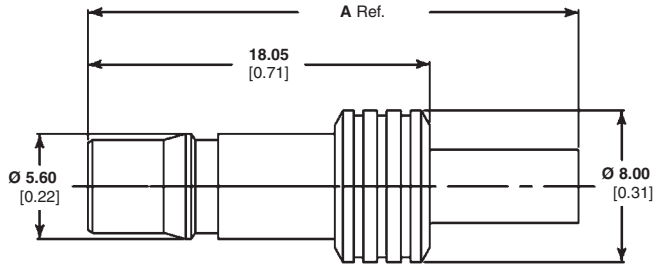
Cable	Dim. A	Part Number
RG 174, 188, 316	**22.90** 0.90	**1408333-1**
RD 316	**22.90** 0.90	**1408333-3**
RG 400	**25.20** 0.99	**1408333-5**
RG 58	**25.20** 0.99	**1408333-7**

Right-Angle Cable Plug



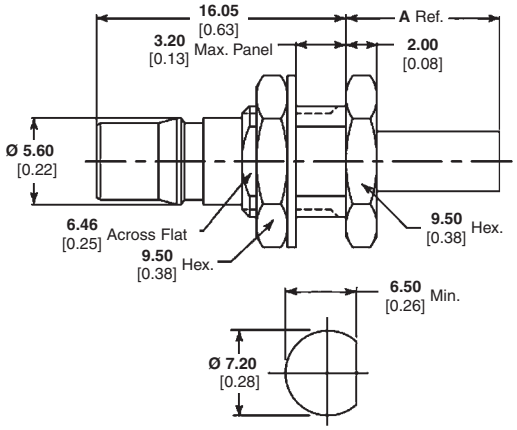
Cable	Dim. A	Dim. B	Part Number
RG 174, 188, 316	**17.20** 0.68	**13.10** 0.52	**1408336-1**
RD 316	**17.20** 0.68	**13.10** 0.52	**1408336-3**
RG 400	**19.50** 0.77	**15.40** 0.61	**1408336-5**
RG 58	**19.50** 0.77	**15.40** 0.61	**1408336-7**

Straight Cable Jack



Cable	Dim. A	Part Number
RG 174, 188, 316	**25.90** 1.02	**1408338-1**
RD 316	**25.90** 1.02	**1408338-3**
RG 400	**28.20** 1.11	**1408338-5**
RG 58	**28.20** 1.11	**1408338-7**

Bulkhead Cable Jack



Recommended Mounting Hole

Cable	Dim. A	Part Number
RG 174, 188, 316	**9.90** 0.39	**1408339-1**
RD 316	**9.90** 0.39	**1408339-3**
RG 400	**12.20** 0.48	**1408339-5**
RG 58	**12.20** 0.48	**1408339-7**

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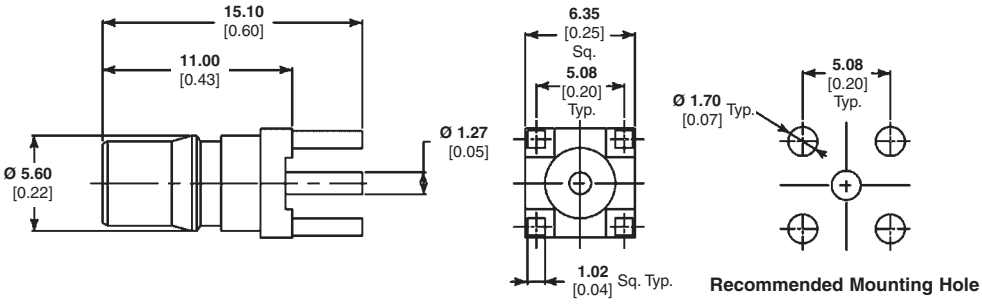
QMA Connectors (Continued)

Printed Circuit Board

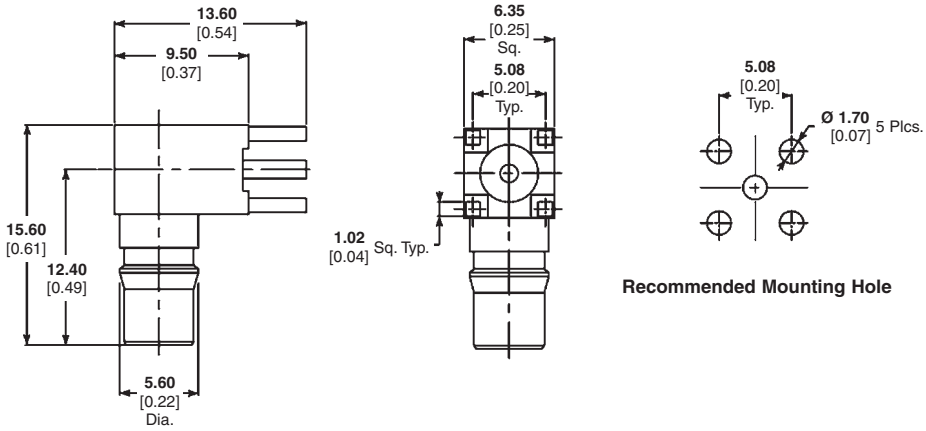
Straight Jack Receptacle

Part Number
1408332-1

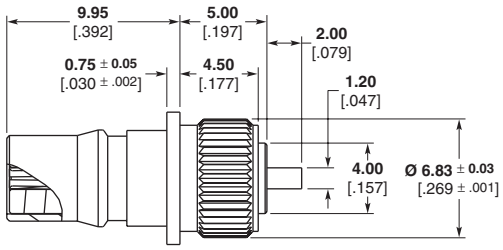


Right-Angle Jack Receptacle

Part Number
1408337-1



Straight Terminal Press-In Jack



Body Material & Finish	Contact Captivation	RF Leakage db min.	Temperature Range	Part No.
Brass, Gold	Mechanical	N/A	–65 to 125° C	**619215-1**

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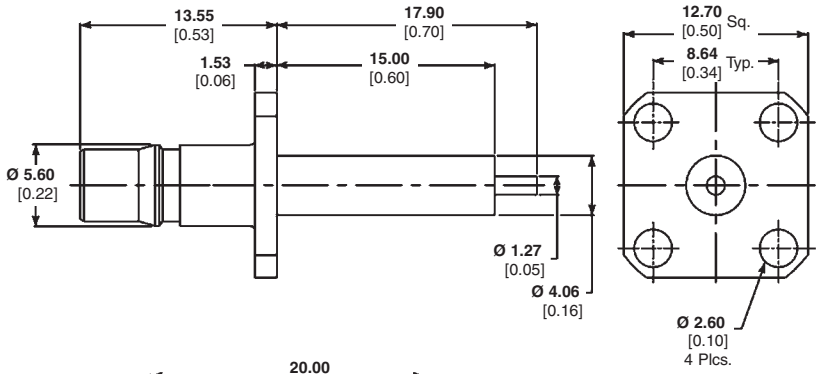
QMA Connectors (Continued)

Straight Terminal

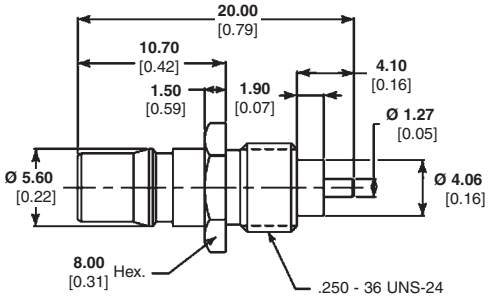
4-Hole Flange Mount Jack Receptacle

Part Number
1408341-1



Screw-In Front Mount Jack Receptacle

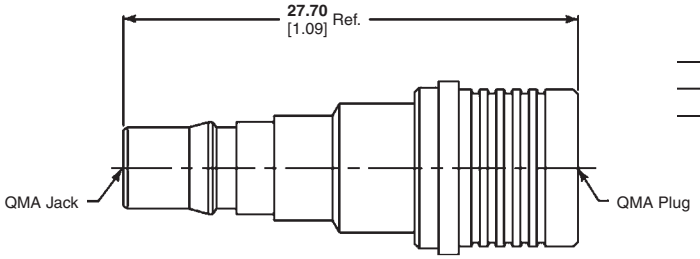
Part Number
1408340-1



Adapters — In Series

QMA Plug to QMA Jack

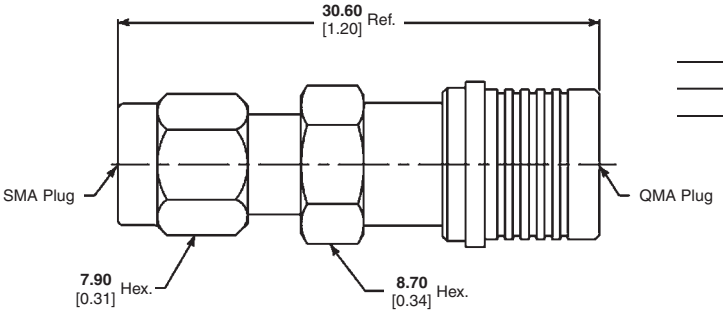
Part Number
1408342-1



Adapters — Between Series

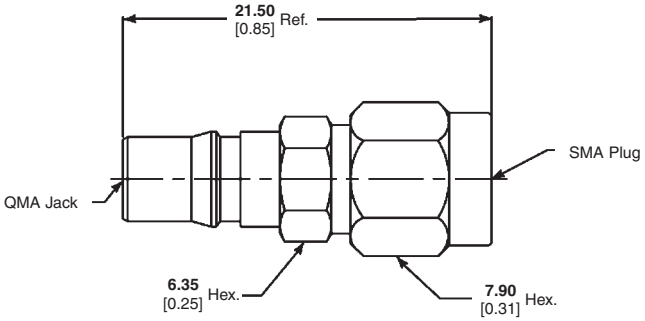
QMA Plug to SMA Plug

Part Number
1408393-1



QMA Jack to SMA Plug

Part Number
1408343-1



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TE Connectivity:
1408343-1