

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 semirigid 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

Collars — Phosphor bronze, white bronze plated

Outer Contacts — BervIlium 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

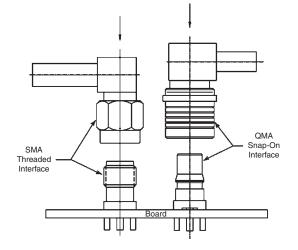
Thermal Shock — EIA-364-32

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

Related Product Data

Product Specifiation — 108-2087

Sample Kit — 1654882

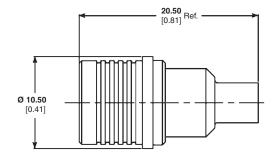




Semi-Rigid Cable — Direct Solder Attachment

Straight Cable Plug

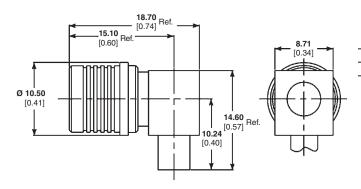




Cable	Part Number
RG 402	1408346-1

Right-Angle Cable Plug

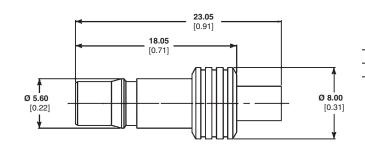




Cable	Part Number
RG 402	1408347-1

Straight Cable Jack

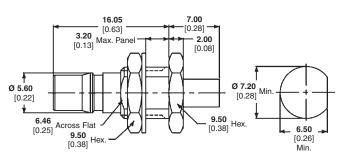




Cable	Part Number
RG 402	1408348-1

Bulkhead Cable Jack





RG 402 **1408349-1**

Part Number

Cable

Recommended Mounting Hole

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

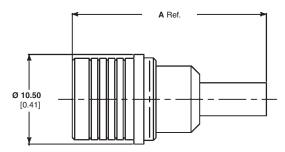
South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208



Flexible Cable — Crimp Attachment

Straight Cable Plug



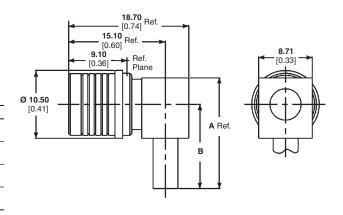


Cable	Dim. A	Part Number
RG 174, 188, 316	22.90 0.90	1408333-1
RD 316	22.90 0.90	1408333-3
RG 400	25.20 0.99	1408333-5
RG 58	25.20 0.99	1408333-7

Right-Angle Cable Plug



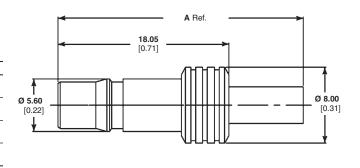
Cable	Dim. A	Dim. B	Part Number
RG 174, 188, 316	17.20 0.68	13.10 0.52	1408336-1
RD 316	17.20 0.68	13.10 0.52	1408336-3
RG 400	19.50 0.77	15.40 0.61	1408336-5
RG 58	19.50 0.77	15.40 0.61	1408336-7



Straight Cable Jack

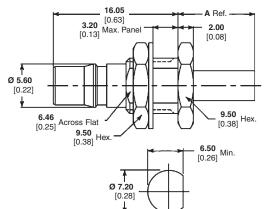


Cable Dim. A		Part Number
RG 174, 188, 316	25.90 1.02	1408338-1
RD 316	25.90 1.02	1408338-3
RG 400	28.20 1.11	1408338-5
RG 58	28.20 1.11	1408338-7



Bulkhead Cable Jack





Cable	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

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

Recommended Mounting Hole

126

Catalog 1307191 Revised 3-07

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 South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208

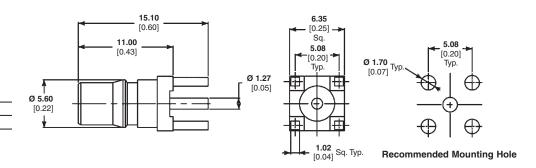


Printed Circuit Board

Straight Jack Receptacle



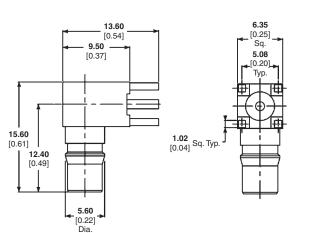
Part Number 1408332-1

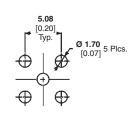


Right-Angle Jack Receptacle



Part Number 1408337-1

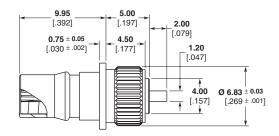




Recommended Mounting Hole

Straight Terminal Press-In Jack





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

 $\textbf{Note:} \ \mathsf{Part} \ \mathsf{Numbers} \ \mathsf{are} \ \mathsf{RoHS} \ \mathsf{compliant} \ \mathsf{except:} \ \blacklozenge \ \mathsf{Indicates} \ \mathsf{non-RoHS} \ \mathsf{compliant}.$

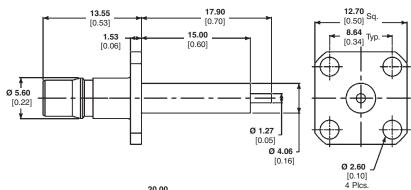


Straight Terminal

4-Hole Flange Mount Jack Receptacle

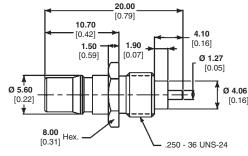


Part Number 1408341-1



Screw-In Front Mount Jack Receptacle

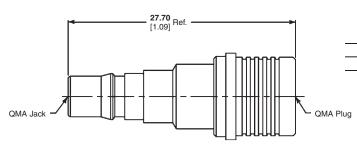




Part Number 1408340-1

Adapters — In Series QMA Plug to QMA Jack



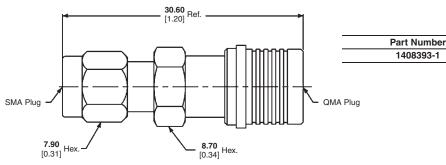


Part Number 1408342-1

Adapters — Between Series

QMA Plug to SMA Plug

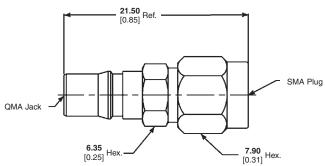




QMA Jack to SMA Plug



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Part Number 1408343-1

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