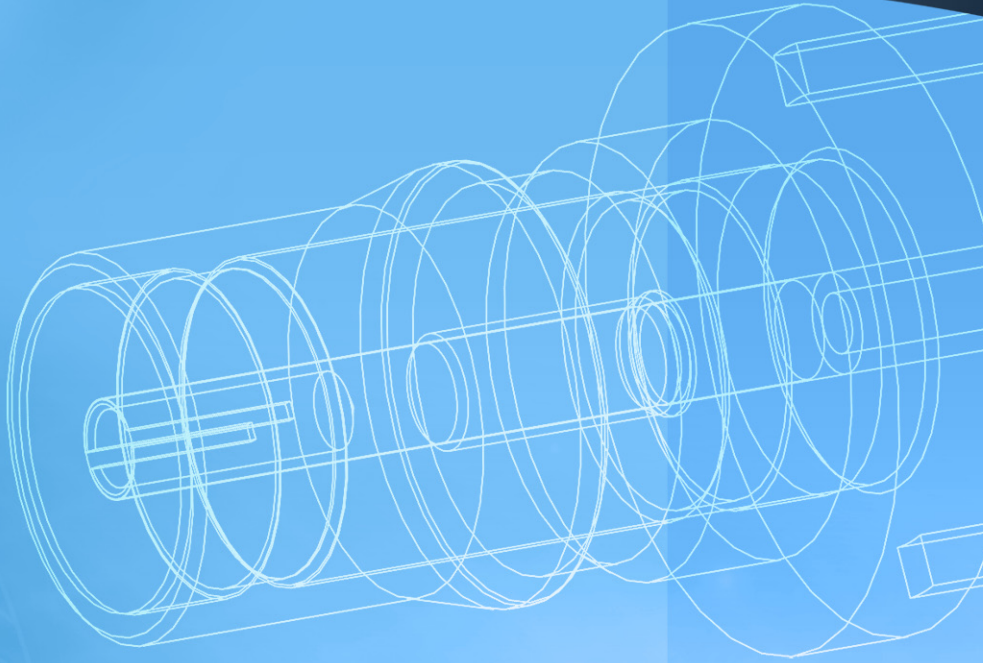


QMA



QMA Connectors

QMA Connector Series

Description

The QMA connector is a quick disconnect version of the SMA connector and shares the same internal construction, which allows the connector to have excellent performance. The electrical performance benefits of the QMA include low loss RF performance up to 18 GHz. Because of the innovative coupling mechanism, a 360-degree butt joint is maintained which results in low RF leakage. Since the RF line is identical to the SMA series, the QMA connectors also offer the same high power handling capability. This gives the series significant advantages over other quick disconnect connectors. Amphenol RF is a member of the Quick Lock Formula® Alliance. For further information on the QLF®, visit www.qlf.info.

Features/Benefits

- Operates at the same electrical performance as SMA up to 18 GHz
- Snap-on interface for quick and easy installation
- Rotatable 360° after connection for flexibility with installation
- Higher Packaging Density, Size equivalent to SMA, but space saving as there is no need for wrench clearance.

Applications

- Base Station Equipment
- Amplifiers

QMA Specifications

Electrical

	Requirements
Impedance	50 Ω
Frequency	DC to 18 GHz
Dielectric Withstanding Voltage	1000 V RMS 50 Hz, sea level
Working Voltage	≤ 480 V RMS 50 Hz, sea level
Insulation Resistance	5 x 10 ³ MΩ min. (initial)
Power Handling	150 W @ 2.5 GHz typical
Contact Resistance	
center contact	3.0 mΩ max. (initial)
outer contact	2.5 mΩ max. (initial)
Passive Intermodulation	-120 dBc @ 1.8 GHz 2x 20 W static
Screening Effectiveness	
DC to 3 GHz	-80 dB min.
3 to 6 GHz	-70 dB min.

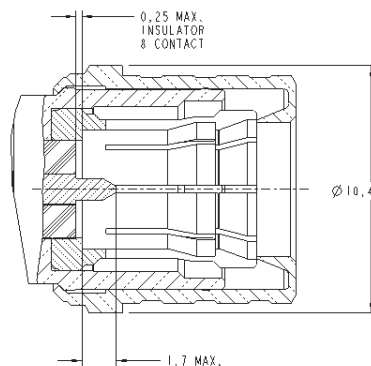
Mechanical

	Requirements
Mating Characteristics	
Engagement Force	25 N typical
Disengagement Force	20 N typical
Interface Retention Force	60 N min.
Durability	100 mating cycles min.
Connector pitch	12.4 mm min. center to center

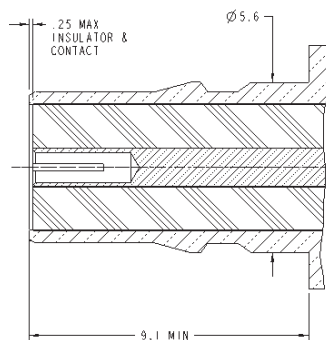
Environmental

	Requirements
Temperature Range	- 40°C to + 85°C
Thermal Shock	IEC 60169-1 16.4 (-40° C / + 85° C)
Corrosion	IEC 60169-1 16.7 (48 hrs)
Damp Heat	IEC 60169-1 16.3 (96 hrs) steady state
Vibration	IEC-68-2-64 random 5-20 Hz: 1.29 (m/s ²) /Hz 20-500 Hz: -3dB/octave

Plug



Jack



Cable Connectors

Straight Plugs



Cable Group	Part Number	Plating		Termination	
		Body	Contact	Body	Contact
L	930-108P-51S	White Bronze	Gold	Solder	Crimp
B2	930-115P-51S	White Bronze	Gold	Crimp	Crimp
L2	930-119P-51S	White Bronze	Gold	Solder	Solder
C	930-120P-51S	White Bronze	Gold	Crimp	Solder
B	930-129P-51S	White Bronze	Gold	Crimp	Crimp

Angle Plugs



Cable Group	Part Number	Plating		Termination	
		Body	Contact	Body	Contact
G2	930-106P-51A	White Bronze	Gold	Crimp	Solder
C	930-110P-51A	White Bronze	Gold	Crimp	Solder
L	930-103P-51A	Gold	Gold	Solder	Solder
L2	930-104P-51A	Gold	Gold	Solder	Solder
C1	930-150P-51A	White Bronze	White Bronze	Crimp	Solder
B	930-118P-51A	White Bronze	Gold	Crimp	Solder


Straight Bulkhead Jacks



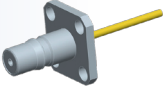
Cable Group	Part Number	Plating		Termination	
		Body	Contact	Body	Contact
B	930-124J-51S	White Bronze	Gold	Crimp	Solder
B2	930-123J-51S	White Bronze	Gold	Crimp	Solder
C	930-125J-51S	White Bronze	Gold	Crimp	Solder
L2	930-121J-51S	Gold	Gold	Solder	Captivated
L	930-122J-51S	Gold	Gold	Solder	Captivated

Receptacles


Straight Press Fit Jacks

Part Number	Body	Plating	Contact	
930-105J-51S	White bronze		Gold	

Straight Panel Jacks: 4-Hole Flange

Part Number	Body	Plating	Contact	
930-109J-51S	White bronze		Gold	

Angle Bulkhead Jacks

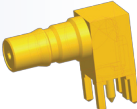
Part Number	Body	Plating	Contact	Description	
930-111J-51P	Gold		Gold	Tape & Reel, 200 piece	

Printed Circuit Board Connectors

Straight Jacks

Part Number	Body	Plating	Contact	Terminal Type	
930-116J-51P	White bronze		White bronze	Blunt Post	

Angle Jacks

Part Number	Body	Plating	Contact	Terminal Type	
930-128J-51P	Gold		Gold	Thru-Hole	

* Amphenol RF is a member of the Quick Lock Formula® Alliance. For further information on the QLF®, visit www.qlf.info.

Cable Group	Cable Type
A	RG-178, 196
B	RG-174, 188A, 316, Belden 7805
B1	RG-179, 187, Belden 9221
B2	RD-188/U, RD-316/U
B3	RD-179/U, AT&T 19224L2
C	RG-58, 58A, 58C, 141, 303, LMR195, Belden 7806A, 9907
C1	RG-55, 142, 223, 400
C2	LMR200, Belden 7807A
D	RG-58/U Plenum, Thinnet, RG-122/U, Belden 88240, 89907
E	RG-59, 62, 140, 210, Belden 8241, 8263, 8279, 9209
E1	RG-59/U 20 AWG center conductor, Belden 1426A, 1505A, 9100, 9278
E2	RD-59/U, Belden 8281, 9141, 9231
E3	RG-59/U Quad Shield, Belden 1152A
F	RG-59/U Plenum, Belden 1560A, 9259, 82259, 89259, 88241
F1	RG-59/U Plenum 20 AWG center conductor, Belden 82108
G1	RG-6, 143, 212
G2	8X, LMR240, Belden 7808A, 9258
G3	LMR400, Belden 7810A, 8214, 9913
G4	RG-8, 8A, 9, 87A, 213, 214, 225, 393
G5	RD-6/U
H	RG-11
H1	Belden 1694A, 9248
H2	Belden 1859A, 7731, 8213, 9292
H3	RG-54A/U
I	AT&T 734A, Belden 1505A
I2	AT&T 735A, Belden 735A1
J	Quad 59 headend cable
K	LMR600
K2	Belden 1695A
K3	RG-122, 180, 195, Belden 1855, 1865A, 8218
L	.141 semi-rigid, RG-402/U
L2	.085, .086, .087 semi-rigid, RG-405/U
L3	.250 semi-rigid
L4	.047 semi-rigid, Belden 1674
M	1/2 inch annular corrugated
M1	1 1/4 inch annular corrugated
M2	1 5/8 inch annular corrugated
M3	7/8 inch annular corrugated
N	1/4 Helical
N1	3/8 Helical
N2	1/2 Helical
N3	7/8 inch SFC
P1	.81 mm OD micro-cable
P2	1.13 mm OD micro-cable, TCB-068
P3	1.32 mm OD micro-cable
P4	1.37 mm OD micro-cable