# Amphenol® RF Global RF Solutions

# **FEATURES & BENEFITS**

Operates at the same electrical performance as SMA up to 6 GHz

Snap-on interface for quick and easy installation

Rotatable 360° after connection for flexibility with installation

# **APPLICATIONS**

**Base Stations** 

**Cable Assemblies** 

**Components (Filters, Amplifiers, Combiners)** 

**Datacom** 

Routers

**Switching Equipment** 

Telecom



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

# **QMA Connector Series**

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 6 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, QMA connectors also offer the same high power handling capability. This gives the series significant advantages over other quick disconnect connectors, although QMA and SMA are not intermatable.

Mechanically the QMA series offers a more convenient installation than SMA connectors. Because the interface mates with a snap-on instead of a threaded coupling, there is a significant time advantage. Typically, these connectors can be installed into a system 10 times faster than an SMA connector. Another benefit of eliminating the threaded coupling is the denser packaging. The pitch between connector can be reduced because there is no requirement for wrench clearance. Finally, the connectors can be rotated 360 degrees after they are mated which greatly improves the flexibility of installations.

# **Specification**

Insulation resistance

#### Electrical

Impedance 50  $\Omega$ Frequency Range DC - 6 GHz

Return Loss DC - 3 GHz > 32 dB

3 - 6 GHz > 25 dB

≥ 5,000 MΩ

Mechanical

Engagement Force 5.6 lbs (25 N)
Disengagement Force 4.5 lbs (20 N)
Retention Force for Interface ≥ 13.5 lb (60 N)

Mating Cycles 100

**Environmental** 

Temperature Range - 40°C to +80°C

# **Part Number System Overview**

930-1XXY-51Z

930: QMA Series

1XX: Sequential Number

Y: Connector Sex

- P Plug
- J Jack
- Z: Body Style
  - S Straight
  - · A Right Angle

# **QMA Plugs**

930-103P-51A: R/A Plug for .141 Semi-Rigid 930-104P-51A: R/A Plug for .086 Semi-Rigid

930-106P-51A: R/A Plug for LMR240

930-108P-51S: Straight Plug for .141 Semi-Rigid

930-110P-51A: R/A Plug for RG-58 930-114P-51A: R/A Plug for RG-316 930-115P-51S: Straight Plug for RD-316 930-118P-51A: R/A Plug for RG-316

930-119P-51S: Straight Plug for .086 Semi-Rigid

930-120P-51S: Straight Plug for RG-58 930-129P-51S: Straight Plug for RG-316

### **Adapters**

930-100A-51S: Jack to SMA Jack Adapter 930-101A-51S: Plug to SMA Jack Adapter 930-130A-51S: Plug to SMA Plug Adapter 930-131A-51S: Jack to SMA Plug Adapter

#### **Jacks**

930-102J-51P: Straight Jack PCB Thru-Hole 930-105J-51P: Straight Jack Press Fit Rcpt

930-107J-51P: Straight Jack Surface Mount Thru-Hole

930-109J-51S: 4-Hole Flange Panel Mount Receptacle

930-111J-51P: Bulkhead R/A Surface Mount

930-112J-51S: 4-hole Flange Receptacle

930-116J-51P: 4-Leg Thru-hole Jack 930-117J-51S: 2-hole Flange Receptacle

930-121J-51S: Straight Bulkhead Jack for .086

930-122J-51S: Straight Bulkhead Jack

930-123J-51S: Straight Bulkhead Jack for RD-316 930-124J-51S: Straight Bulkhead Jack for RG-316

930-125J-51S: Straight Bulkhead Jack for RG-58

930-126J-51S: Bulkhead Receptacle

930-127J-51S: Bulkhead Receptacle Front Mount

930-128J-51P: R/A PCB Jack

