

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



QMA Connectors

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

Electrical

| | |
|-----------------------|---|
| Impedance | 50 Ω |
| Frequency Range | DC - 6 GHz |
| Return Loss | DC - 3 GHz > 32 dB 3 - 6 GHz > 25 dB |
| Insulation resistance | $\geq 5,000 M\Omega$ |

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