

Field Replaceable SMA Connectors >

In high-performance, low-leakage radio frequency (RF) applications such as test and measurement devices, Field Replaceable SMA Connectors offer a solderless and easily replaceable connector design with a high mating cycle rating that can be dropped in to replace a damaged component or improve system performance.



ADVANTAGES AND FEATURES

Simplifies replacement

The solderless design makes it easy to replace damaged connectors in the field and enables up to 500 mating cycles for test and measurement applications.

Provides high performance with low RF leakage

The design supports frequencies from DC up to 26.5 GHz with an integral grounding ring on the rear of the flange to improve contact resistance with the package.

Enables use with sealed RF microwave applications

Packaging options for applications requiring hermetically sealed or unsealed connectors are available.

Connector Type	SMA
Frequency	DC to 26.5 GHz
RF Leakage	-92 dB (max.)
Pin Diameter	.012, .015, .018, .020"
Mating Cycles	Up to 500
VSWR	1.18:1
Operating Temperatures	-65 to +165°C

Offers design flexibility through multiple standard designs

A full portfolio of options is available, including various pin diameters and standard flange designs.

Streamlines procurement and design work

The standard SMA form factor mates with Molex cable plugs and cable assemblies for easily sourced, full-package solutions.

MARKETS AND APPLICATIONS

Telecommunications

Test and measurement devices
Laboratory test fixtures
Microwave systems

Wireless Infrastructure

Handheld radio dongles
Wi-Fi antenna systems
Transceiver box radio dongles



Laboratory Test Fixtures



Microwave Systems



Wi-Fi Antenna Systems

Field Replaceable SMA Connectors

SPECIFICATIONS

Reference Information

Packaging: Tray
Designed in: Inches
RoHS: Yes

Electrical

Frequencies: DC to 26.5 GHz
Voltage (max.): 335V RMS (sea level)
Nominal Impedance: 50 Ohms
Contact Resistance:
 Inner—3 milliohms
 Outer—2 milliohms
Insertion Loss: $.03 \sqrt{f}$ (GHz) dB (max.)
Insulation Resistance: 5,000 Megohms
VSWR: 1.18:1 (max.) at 26.5 GHz
RF Leakage: -92 dB (max.)

Mechanical

Contact Retention: 2.72kg (6 lbs.) axial
Mating Cycles: Up to 500
Vibration Resistance: MIL-STD-202, method 204, condition D
Shock Resistance: MIL-STD-202, method 213, condition I
Moisture Resistance: MIL-STD-202, method 106, 500 Megohms 5 min. after removal
Pin sizes: .012, .015, .018, .020"
Attachment: Two- or four-hole flange
Operating Temperatures: -65 to +165°C

Physical

Body: Passivated Stainless Steel
Contact: Beryllium Copper
Contact Plating: Gold
Insulator: Teflon

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