

SMA Connector Series

Aptiv's 50 Ohm SMA connectors are designed to MIL-STD-348 standards and feature a .250-36 threaded coupling interface, supporting frequencies from DC to 18 GHz. Our patented V-Bite® Edge-Mount SMA PCB connectors offer simplified assembly, exceptional RF performance, and enhanced mechanical strain relief. Ideal for a wide range of applications—including Test & Measurement, Aerospace & Defense, Satellite and Wireless Communication, and Medical Devices—our SMA series is available in both standard and custom configurations to meet your specific needs.

FEATURES

- Available in straight and right-angle designs for popular flexible and semi-rigid cables
- Threaded coupling ensures connector will not decouple in vibration-intensive applications
- SMA connectors designed for IW Microwave's 1801, 2301, and 2801 series microwave cables
- V-Bite® Edge-Mount SMA Connectors available
- QC-SMA™ Quick Connect SMA Plugs feature a push / pull coupling mechanism that is fast and easy to use
- E-Snap® Edge-Mount connectors provide superior RF performance versus traditional right-angle connects



SPECIFICATIONS

Electrical Properties	
Impedance	50 Ohms
Frequency Range	DC to 18 GHz / Flexible Cable 0 to 12.5 GHz / Semi-Rigid 0 to 18 GHz
Insertion Loss	Straight – $.04 \times \sqrt{f(\text{GHz})}$ Max / R/A – $.07 \times \sqrt{f(\text{GHz})}$ Max / $0.06 \times \sqrt{f(\text{GHz})}$ dB Max /
VSWR	Straight – 1.15 Max / R/A – 1.2 Max / 1.17 Max DC to 18 GHz / Straight – $1.10 + .01 \times f(\text{GHz})$ Max / R/A – $1.15 + .02 \times f(\text{GHz})$ Max
Environmental Properties	
Temperature Rating	-65°C to + 165°C
Mechanical Properties	
Moisture Resistance	MIL-STD 202, Method 106
Corrosion	MIL-STD-202, Method 101, Cond B
Vibration	MIL-STD-202, Method 204, Cond B
Material	
Body	Copper Alloy / Stainless Steel Solder / Brass
Contact Materials	Male – Brass / Female – BECU / Outer Contacts – Copper Alloy / Center Contacts – Copper Alloy or Brass
Insulator	PTFE