Amphenol[®] RF

SMA Connectors for Automotive Cable

Compact, Light-Weight Interface Optimized for Low Loss Cable



Overview

Amphenol RF offers an expanded line of 50 ohm SMA connectors optimized for traditional low loss automotive cable types: TFC-302LL, TFC 3.6 mm LL-50, RTK301, RTK-044 and DACAR-302. The SMA interface is compact and light-weight, and is available in bulkhead jack and straight and right-angle plug configurations. These connectors are ideal for applications where low return loss and vibration resistance is necessary.

The SMA interface supports frequencies up to 18 GHz ensuring optimal performance through 6 GHz, the cut off frequency of the cable, and utilizes the popular threaded coupling mechanism. All designs feature a cable crimp termination which allows for quick and secure assembly using standard hex crimp tooling, and a soldered center contact.

Low loss cable types are designed to offer reliable electrical and mechanical performance. They feature a stranded center and compliment the low loss capabilities of the SMA connector. All supported cables are highly flexible and offer stable impedance and low signal attenuation.

Features and Benefits

- Compact and light-weight design
- Vibration resistant
- \cdot Extremely low loss through 6 GHz
- Available in various configurations

Applications

- Automotive Testing
- Antennas
- GPS
- Wireless Connectivity
- Broadband
- V2V Communication

Amphenol RF Four Old Newtown Road Danbury, CT 06810

For more information visit <u>www.amphenolrf.com</u> or call 800.627.7100

Ordering Information

Cable Type	Part Number	Description
TFC-302LL	901-10734	SMA Straight Plug, Nickel Plating
	901-10735	SMA Straight Jack, Gold Plating
	901-10736	SMA Straight Bulkhead Jack, Gold Plating
	901-10737	SMA Right-Angle Plug, Nickel Plating
RTK-044	901-10848	SMA Straight Plug
	901-10849	SMA Straight Jack
	901-10850	SMA Straight Rear Mount Bulkhead Jack
	901-10851	SMA Right-Angle Plug

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Technical Specifications

Electrical

Impedance		50Ω	
Frequency Range		DC - 20 GHz	
Dielectric Withstanding Voltage		1000 VRMS Min	
VSWR (Return Loss)	DC – 6 GHz	1.2:1 Max	
Insulation Resistance		5000 MΩ Min	
Center Contact Resistance		1.5 mΩ Min	
Outer Contact Resistance		0.2 mΩ Min	

Environmental

Temperature Range	-65°C to +165°C	
RoHS Compliance	Compliant with Exemption 6C	

Mechanical

Mating Cycles	500 Min	
Coupling Mechanism	Threaded	

Materials

	Plug	Jack
Body	Brass, Nickel Plating	Brass, Gold Plating
Male Contact	Brass, Gold Plating	-
Female Contact	-	BeCu, Gold Plating
Ferrule	Brass, Nickel Plating	
Insulator	PTFE, Natural	

Note: Technical specifications are typical and may vary by specific part number. Please see component drawing.

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