

Overview

The FAKRA to SMA adapter is designed to connect FAKRA dependent automotive systems with SMA-based RF devices. The push-on coupling mechanism of the FAKRA interface and the threaded coupling mechanism of the SMA interface ensures secure, application-specific connections. Offering broad frequency support with operating capabilities of up to 4 GHz, this adapter is ideal for GPS, test and measurement instrumentation, LTE, and V2X communication protocols.

The adapter is engineered with durable materials that guarantee performance and longevity in harsh conditions. The ruggedized body and shell are made from nickel-plated brass over copper strike while the contact is manufactured from gold-plated brass over nickel and copper strike. A natural colored PTFE insulator offers high-frequency stability. The housing is made from 30% glass-filled Nylon 46, while the retainer ring is natural finished SUS304.

FAKRA to SMA adapters are suited for automotive, industrial automation, and testing equipment.

Features and Benefits

- Cross-system compatibility
- Excellent return loss
- Ruggedized construction
- High-mating durability

Applications

- Automotive
- Industrial Automation
- Connected Vehicle Systems
- Telecommunications
- RF Test Systems



Amphenol RF

Four Old Newtown Road
Danbury, CT 06810

For more information visit
www.amphenolrf.com
or call 800.627.7100

Ordering Information

FAKRA to SMA Adapters for TFC 302LL and RG-174 Cable

Part Number	Description	
APH-FKJ-SMAJ	FAKRA Jack to SMA Jack	
APH-FKP-SMAP	FAKRA Plug to SMA Plug	

Amphenol® RF

Technical Specifications

Electrical

Impedance	50Ω
Frequency Range	DC - 4 GHz
Dielectric Withstanding Voltage	800 VRMS Min
VSWR	1.1 Max

Environmental

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

Mechanical

Mating Cycles	500 Min
FAKRA Coupling Mechanism	Push-on
SMA Coupling Mechanism	Threaded

Materials

Body	Nickel-Plated Brass, Copper Strike
Contact	Gold-Plated Brass, Nickel, Copper Strike
Insulator	PTFE, Natural

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

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