# molex

FAKRA II SMB connectors, with 360° rotation and secondary locking latch deliver easy cable routing between antennas and multi-media units while meeting the USCAR requirements for on-boards telematic systems

Molex's FAKRA II SMB product offering meets both American USCAR and German FAKRA automotive standards. The FAKRA II connector system retains the high-performing, cost-effective RF attributes as the original FAKRA Connector.

The enhanced features offered by the FAKRA II connector system demonstrate Molex's dedication to meet the continued mechanical and environmental requirements of the automotive industry.

For more information on Molex's extensive FAKRA product offering, visit: www.molex.com/link/fakra.html

#### **Features and Benefits**

Connector rotates 360° inside the plastic shroud	Ease-of-routing inside an automobile. Less stress on the cable
Secondary plug locking latch	For enhanced reliability. Meets USCAR and FAKRA specifications
Numerous keying options and color codes	For design flexibility and ease-of- reference
Stamped and formed contacts	Lower selling price versus machined FAKRA connectors
Cable-mount jacks and plugs	Versatility for customer's design
Mates with FAKRA I PCB jacks and plugs	Backward compatibility to existing components minimizes additional costs

#### **Specifications**

#### **Reference Information**

Packaging: Bulk, contact on reel Mates With: FAKRA of same key/color (see table back)

Designed In: mm RoHS: Yes

Halogen Free: Yes

#### **Electrical**

Frequency: DC to 6 GHz Impedance:  $50\Omega$ 

VSWR: 1.3 to 6 GHz max.

Contact Resistance: 5 milliohms max. Dielectric Withstanding Voltage:

1000 Vrms

Insulation Resistance: 5000 Megohms min.

FAKRA II Jacks

**FAKRA II SMB** 

**Connector System** 

Plugs and Jacks

73403 FAKRA II SMB Cable

FAKRA II Plug

#### Mechanical

Retention Force of Latched Housing:

>110 newtons

Mating Force: 25 newtons max. Unmating Force: 25 newtons max. Durability (min.): 50 cycles

### Physical

Housing: Nylon 66 Body: Brass

Contact: Phosphor Bronze

Plating:

Contact Area — Gold/Tin

Body — Nickel Operating Temperature:

-40 to +105°C



### **FAKRA II SMB Connectors Key Code / Color by Application**

# **FAKRA II SMB Connector System**

Coding	Α	В	С	D	E	F	G	Н	I	J	K
	Ġ	0	6	0	6	Ø	0	g		0	0
Color	Black	White	Blue	Bordeaux Violet	Green	Brown	Gray	Violet	Beige	Curry Yellow	Water Blue
RAL	RAL 9005	RAL 9003	RAL 5005	RAL 4004	RAL 6002	RAL 8011	RAL 7031	RAL 4003	RAL 1001	RAL 1027	RAL 5021
Device or application	DAB / Radio without phantom support	DAB / Radio with phantom support	GPS	GSM / Mobile phone	TV1	TV2	Remote control / Keyless entry	Radio controlled parking heating	Bluetooth	Radio with IF	Neutral coding

#### **Applications** Antenna Radio Cables GPS Diversity Telematic Applications / Box - GPS - Radio Television - Cell Phones – WiFi - Bluetooth Satellite Keyless Entry Radio Antenna with FAKRA II Other Markets Connectors - SDARS - Smart Grid

Built-in Cellular

Communications

Telematics

## **Ordering Information**

Cable Plugs Order No.	Description	Cable Jack Order No.	Description	Keying Option	Color	
73403-5740		73403-5760		А	Black	
73403-5741		73403-5761		В	White	
73403-5742	FAKRA II Cable Plug with RG174/316 Cable	73403-5762		С	Blue	
73403-5743		73403-5763		D	Bordeaux Violet	
73403-5744		73403-5764		Е	Green	
73403-5745		73403-5765	FAKRA II Cable Jack with RG174/316 Cable	F	Brown	
73403-5746		73403-5766		G	Gray	
73403-5747		73403-5767		Н	Violet	
73403-5748		73403-5768		I	Beige	
73403-5749		73403-5769		J	Curry Yellow	
73403-5750		73403-5770		K	Water Blue	
73403-5751		73403-5771		L	Carmine Red	
73403-5752		73403-5772		M	Pastel Orange	
73403-5753		73403-5773		N	Pastel Green	

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Tire Pressure

Monitoring

Parking

Sensors