



**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-board telematics systems'**

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

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.

## 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 to specific applications                                                                                                  |
| Machined contact versions available              | Use industry-standard indent-crimp terminal tools (Daniels AFM8) providing ease-of-use without additional tooling investment. Ideal for low-volume applications        |
| Stamped-center contact versions available        | Use special crimp dies and are ideal for bench-top or pneumatic crimping machines. Provide the most cost-effective FAKRA connector. Ideal for high-volume applications |
| Cable-mount jacks and plugs                      | Versatility for customer's design including in-line connections                                                                                                        |
| Mates with original FAKRA 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 on page 2)  
Designed In: mm  
RoHS: Yes  
Halogen Free: Yes

### Electrical

Frequency: DC to 6 GHz  
Impedance: 50 Ohms

VSWR: 1.3 to 6 GHz max.  
Contact Resistance: 5 milliohms max.  
Dielectric Withstanding Voltage: 1000V RMS  
Insulation Resistance: 5000 Megohms min.

### Mechanical

Retention Force of Latched Housing: >110N

Mating Force (max.): 25N  
Unmating Force (max.): 25N  
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 Connector System

**73403** FAKRA II SMB Cable Plugs and Jacks



FAKRA II SMB Jacks



FAKRA II SMB Plug

| Coding                | A                                                                                 | B                                                                                 | C                                                                                 | D                                                                                 | E                                                                                 | F                                                                                 | G                                                                                 | H                                                                                   | I                                                                                   | K                                                                                   | Z                                                                                   |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                       |  |  |  |  |  |  |  |  |  |  |  |
| 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                                                                      |

### Ordering Information

| Order No. Cable Plugs | Order No. Cable Jacks | Contact Style                         | Cable     | Keying Option | Color           |
|-----------------------|-----------------------|---------------------------------------|-----------|---------------|-----------------|
| <u>73403-6260</u>     | 73403-6280            | Machined<br>(low-volume applications) | RG174/316 | A             | Black           |
| 73403-6261            | 73403-6281            |                                       |           | B             | Cream White     |
| 73403-6262            | 73403-6282            |                                       |           | C             | Blue            |
| 73403-6263            | 73403-6283            |                                       |           | D             | Bordeaux Violet |
| 73403-6264            | 73403-6284            |                                       |           | E             | Green           |
| 73403-6265            | 73403-6285            |                                       |           | F             | Brown           |
| 73403-6266            | 73403-6286            |                                       |           | G             | Gray            |
| 73403-6267            | 73403-6287            |                                       |           | H             | Violet          |
| 73403-6268            | 73403-6288            |                                       |           | I             | Beige           |
| 73403-6269            | 73403-6289            |                                       |           | K             | Curry Yellow    |
| 73403-6270            | 73403-6290            |                                       |           | Z             | Water Blue      |
| 73403-6271            | 73403-6291            |                                       |           | L             | Carmine Red     |
| 73403-6272            | 73403-6292            |                                       |           | M             | Pastel Orange   |
| 73403-6273            | 73403-6293            |                                       |           | N             | Pastel Green    |
| 73403-5740            | 73403-5760            | Stamped<br>(high-volume applications) |           | A             | Black           |
| 73403-5741            | 73403-5761            |                                       |           | B             | Cream White     |
| 73403-5742            | 73403-5762            |                                       |           | C             | Blue            |
| 73403-5743            | 73403-5763            |                                       |           | D             | Bordeaux Violet |
| 73403-5744            | 73403-5764            |                                       |           | E             | Green           |
| 73403-5745            | 73403-5765            |                                       |           | F             | Brown           |
| 73403-5746            | 73403-5766            |                                       |           | G             | Gray            |
| 73403-5747            | 73403-5767            |                                       |           | H             | Violet          |
| 73403-5748            | 73403-5768            |                                       |           | I             | Beige           |
| 73403-5749            | 73403-5769            |                                       |           | K             | Curry Yellow    |
| 73403-5750            | 73403-5770            |                                       |           | Z             | Water Blue      |
| 73403-5751            | 73403-5771            |                                       |           | L             | Carmine Red     |
| 73403-5752            | 73403-5772            |                                       |           | M             | Pastel Orange   |
| 73403-5753            | 73403-5773            |                                       |           | N             | Pastel Green    |

## Applications

### Telematic Applications

- GPS
- Radio
- Television
- Cell Phones
- WiFi
- Bluetooth
- Keyless Entry

### Other Markets

- SDARS
- Smart Grid

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