



Overview

The AUTOMATE® Mini-FAKRA connector series, the latest in automotive interconnect technology, is a space-conscious, high-performance interface central to the next generation of vehicle applications. Supporting up to 20 Gbps data transmission, AUTOMATE connectors reduce installation space requirements by up to 80% compared to previous FAKRA products. Color coded housings provide visual guidance during the assembly process and mechanical keying options prevent mis-mating of connectors.

Features and Benefits

- Modular multiport design offering 80% installation space savings vs traditional FAKRA
- 20 Gbps data transfer rate ideal for high bandwidth applications
- Color coded for visual keying
- Mechanically keyed to prevent mismating
- Position assurance features - TPA and optional CPA
- Rugged impact resistant construction

Applications

- 360° Surround View Camera
- ECUs and Compute Modules
- Autonomous Vehicles
- Advanced Driver Assistance Systems (ADAS)
- GPS Navigation
- 3D Instrument Cluster
- High Bandwidth Infotainment
- Remote Start and Vehicle Controls
- V2X Communication

Amphenol RF

Four Old Newtown Road
Danbury, CT 06810

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

Ordering Information

AUTOMATE Type A PCB Connectors

Part Number	Description
FM4-NARP-PCB-1	Quad Port Right Angle PCB Plug, A Code
FM4-NBRP-PCB-1	Quad Port Right Angle PCB Plug, B Code
FM4-NCRP-PCB-1	Quad Port Right Angle PCB Plug, C Code
FM4-NDRP-PCB-1	Quad Port Right Angle PCB Plug, D Code
FM4-NZRP-PCB-1	Quad Port Right Angle PCB Plug, Z code

Note: See Key Code Chart on reverse side for all available codes.
Contact factory for mating assembly information.

Custom Solutions

AUTOMATE Cable Assemblies - Application specific solutions designed per customer requirements

AUTOMATE Sealed Solutions - Increased protection for harsh environment applications

Contact Amphenol RF sales for additional information

Amphenol® RF

Technical Specifications (Connectors)

Electrical

Impedance	50 Ω Nominal	
Frequency Range	DC - 9 GHz	
Return Loss	1.12 (-25dB) Max. @ DC - 3 GHz	
	1.22 (-20dB) Max. @ 3 GHz - 6 GHz	
	1.67 (-12dB) Max. @ 6 GHz - 9 GHz	
Dielectric Withstanding Voltage	750 VRMS	
Current Rating	≤2A DC	
Contact Resistance	Center Contact	<5mΩ
	Outer Contact	<5mΩ

Mechanical

Mating Cycles	25 Cycles Min.
Engagement Force	≤50N
Disengagement Force	≥5N

Environmental















Temperature Range	-40°C to +105°C
RoHS	Compliant with exemption 6C

Materials

Body	Zinc Alloy, Matte Tin Plated
Outer Contact	Brass, Matte Tin Plated
Center Contact	Copper Nickel Alloy, Gold Plated
Housing	PA4T
Insulator	LCP

Note: Technical specifications are typical and may vary by specific part number and design. See component drawing for additional details.

KEY CODE CHART

Keying							
Code	A	B	C	D	E	F	Z
Color	Jet Black 	Cream 	Signal Blue 	Claret Violet 	Leaf Green 	Nut Brown 	Water Blue 

Amphenol RF

Four Old Newtown Road
Danbury, CT 06810

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