

# FAKRA Automated Coax Connector System

Enabling RF performance  
up to 6 GHz for the  
automotive industry



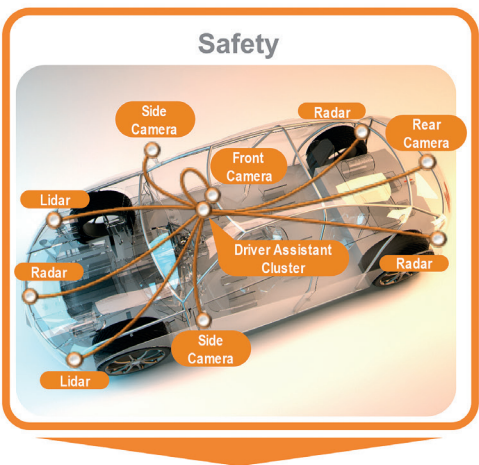
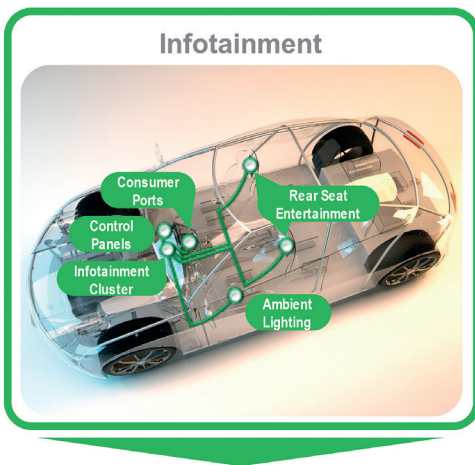
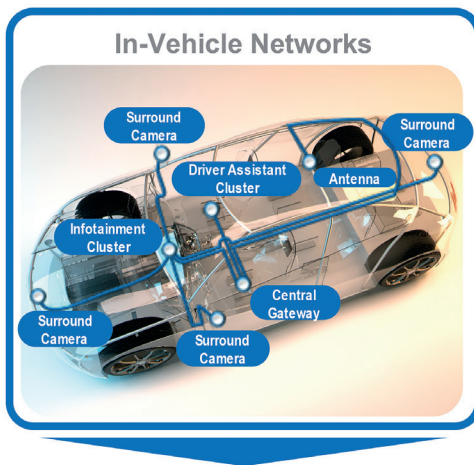
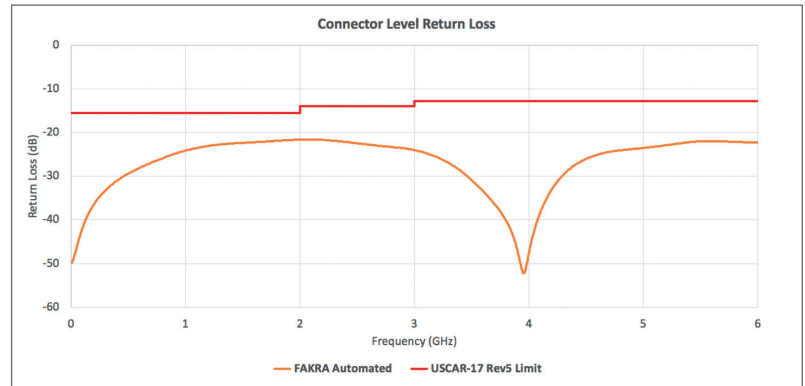
# FAKRA Automated Coax Connector System

Enabling RF performance up to 6 GHz for the automotive industry

TE Connectivity's (TE's) next generation FAKRA Automated RF connectors are designed for harsh environments and can transmit RF signals up to 6 GHz. This new interconnection system is an automotive-grade design offering reliability plus affordability with the manufacturing process advantage of full automation.

FAKRA Automated offers safe and reliable processes for high-speed data, leveraging our decades of experience with FAKRA components, terminals and cable assemblies. These robust connectors are designed for tomorrow's RF requirements, supporting a variety of automobile applications such as in-vehicle networks, infotainment and safety domains.

FAKRA Automated was designed to meet or exceed ISO 20860-1 (50 Ohms Impedance RF Connection System Interface), SAE/USCAR-17, SAE/USCAR-18, and SAE/USCAR-2 (Performance specifications for Automotive RF Connector Systems).



**V2X**  
Traffic info  
Vehicle tracking

Touch screen control panel  
Vehicle dashboards  
Human Machine Interfaces (HMI)

Surround view cameras  
Automated emergency braking  
Lane assist

## Benefits

- Optimized for automated manufacturing
- Full product family with 14 key codes, sealed, unsealed, 180° and 90°
- CPA capable
- Reduced cost and price
- RF performance up to 6 GHz
- Primary and secondary locks
- Tulip contact / anti-stubbing
- Housing inner ring / anti-scooping
- Global manufacturing

## Applications






- On-board diagnostics (V2X)
- 360 degree surround view camera
- Advanced Driver Assistance Systems (ADAS)
- In-vehicle networks
- 5G
- Dual Band Wi-Fi

## Market Compatibility\*

- Serializer/Deserializer (SerDes)
- GMSL 2/3
- FPD-Link IV
- APIX3





\* ) Protocols supported with appropriate cable

## FAKRA Automated Header Portfolio

	Description	TE PN	Specifications
	1 pos 180 deg	X-2203452-X	Product Specification: 108-18079 Application Specification: 114-32108
	1 pos 90 deg	X-2291392-X	
	1 pos 90 deg with shield	X-2209201-X	Product Specification: 108-132071 Application Specification: 114-101020
	1 pos 90 deg edge mount	X-2287906-X	Product Specification: 108-32058 Application Specification: 114-32108
	2 pos 180 deg	X-2272788-X	
	2 pos 180 deg edge mount	X-2287923-X	

xxx-1 Code A / xxx-2 Code B / refer customer drawings for further codings

## Female Connector Portfolio

	Description	TE PN	Specifications
Unsealed	 180 deg single	X-2289729-X* X-2203573-X#	Product Specification: 108-32137
	 180 deg dual	X-2289731-X* X-2203577-X#	Application Specification: 114-32145
	 90 deg single	X-2291859-X*	Product Specification: 108-94089 Application Specification: 114-32217
Sealed	 180 deg single	X-2307206-X*	Product Specification: 108-94631 Application Specification: 114-32145
	 90 deg single	X-2298733-X*	Product Specification: 108-162005 Application Specification: 114-162005

## Male Connector Portfolio

	Description	TE PN	Specifications
Unsealed	 180 deg single	X-2203571-X*	Product Specification: 108-32137
	 180 deg dual	X-2203575-X*	Application Specification: 114-32145
Sealed	 180 deg single	X-2307198-X*	Product Specification: 108-2129 Application Specification: 114-18622

\* CPA variant; part number is housing only.

# Non-CPA variant; part number is housing only.

Refer FAKRA catalog (PN 1308073-3) on clip slot variants, center contacts, sub-assemblies, and ferrules.

xxx-1 Code A / xxx-2 Code B / refer customer drawings for further codings.

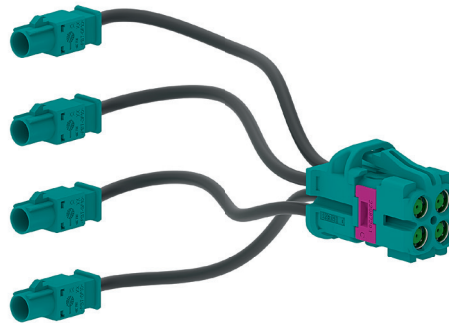
## Next Generation of Coax: Miniaturized Terminals

TE Connectivity's MATE-AX miniaturized coax terminal provides the industry with 9 GHz RF performance and more in much smaller, lighter layouts. A 4-terminal MATE-AX connector is 75% smaller and 34% lighter than a 4-terminal FAKRA connector.

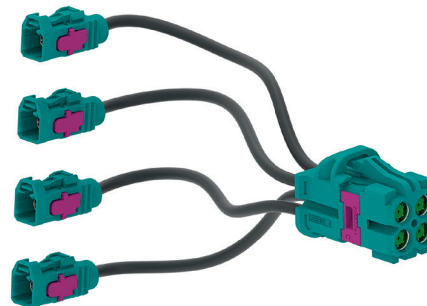
TE's MATE-AX terminals are designed to be compatible with existing coax cables, and by using a fully automated crimping process the same cable type can be terminated with FAKRA on one end and MATE-AX on the other.

For further information on MATE-AX, please contact our TE experts below.

## MATE-AX Cable Assembly: Examples



4x FAKRA Jack  
- 4 pos. Plug



4x FAKRA Plug  
- 4 pos. Plug

**For further information  
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