



HD FLOATING HEADER - 2-PIECE

Characteristics

Frequency	Up to 6 GHz
Application	Automotive
	Floating Camera Connector
Weight	Plug: 0.70g, Socket: 0.13g
Temperature Range	-40 to +105 °C
IP Class	IP6K7(unmated) to IPX9K (mated)
Misalignment compensation	± 0.5 mm in x-, y- and z-axis

Features

- Misalignment compensation of ± 0.5 mm in all dimensions
- 6 GHz for HD camera systems
- Customizable housing including press-fit and over-molded options
- Choice of FAKRA interconnection system or MATE-AX interconnection system interfaces
- High sealing class: Up to IP6K9K

Our standard floating connectors support high-end 8-12-megapixel cameras with frame rates of 30-60 frames per second (fps). They combine compact design with high bandwidth and a high-level misalignment compensation. *

We offer 2-piece and 1-piece HD connectors that support a bandwidth of 6 GHz and beyond providing misalignment compensation of ± 0.5 mm in all directions.

The 2-piece floating solution is designed for very low normal insertion forces to the PCB and is therefore an optimal solution for a one-PCB camera design, with an imaging sensor positioned opposite the floating header.

All our solution variants are customizable and adaptable for an optimal fit to your camera module, including: length; interface (FAKRA interconnection system or MATE-AX interconnection system) or PCB mounting technology (surface-mounted, through-hole or solderless).

All connectors' interfaces are interchangeable between FAKRA interconnection system and TE's MATE-AX interconnection system and are available with 180° and 90° mounting direction.

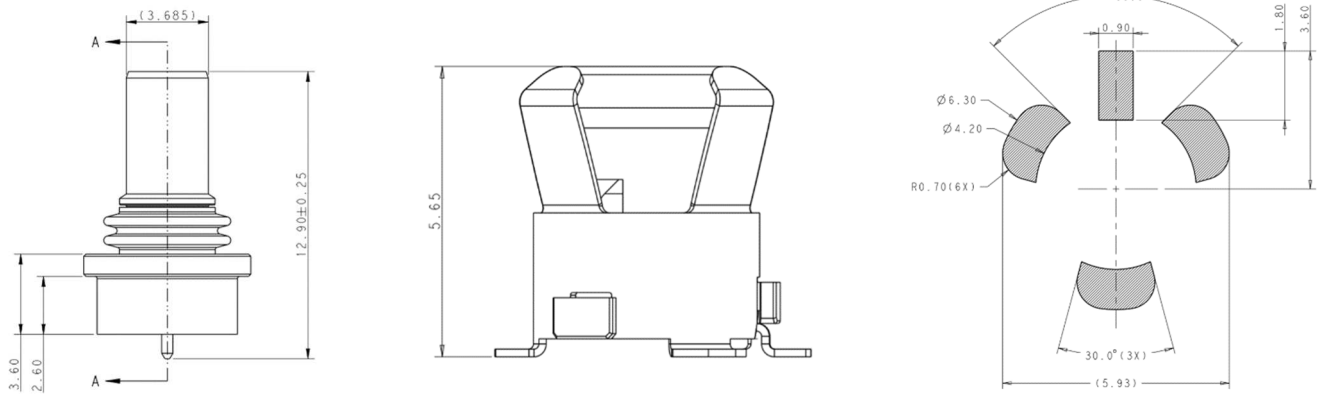
In addition to an outer sealing, all variants feature an inner sealing for water proofing IP6K9K.

* Further compact solutions for specific assembly space requirements are available on request

COAXIAL CONNECTIVITY SOLUTION FOR AUTOMOTIVE CAMERAS

HD Floating Header , 2 piece

Dimensions



RF Parameter	Performance
Impedance	50 Ohm
Insertion Loss @ 0-3 GHz @ 3-6 GHz	max 0.3 dB max 0.45 dB
Return Loss 0 GHz < f ≤ 2 GHz 2 GHz < f ≤ 3 GHz 3 GHz < f ≤ 6 GHz	≥ 15.56 dB ≥ 13.98 dB ≥ 12.74 dB
Electrical Data	Performance
Contact Resistance (of signal and outer contact) *1	max. 40 mOhm
Isolation Resistance	min. 100 MOhm
DC Current (depending on cable type)	1 A
Operating Voltage	60 V DC
Test Voltage	800 V rms
Mechanical Data	Performance
Mating Cycles	≤ 25
Mating Force	≤ 25 N (Depend on the Plug side)
Ummating Force	≤ 25 N
ENVIRONMENTAL Data	Performance
Mechanical Shock	LV214 Class II / USCAR-2 Rev 6, Class V1
Vibration	LV214 Class II / USCAR-2 Rev 6, Class V1
Thermal Shock	USCAR-2 Rev.6, 5.6.1.3 -40°C / +105 °C;
Humidity Resistance	USCAR-2 Rev.6, 5.6.2.3 -40°C / +105 °C;
Temperature Resistance	USCAR-2 Rev.6, 5.6.3.3 105 °C;

*1) The contact resistance of the mated connection is shown in the product specification.



COAXIAL CONNECTIVITY SOLUTION FOR AUTOMOTIVE CAMERAS

HD Floating Header , 2 piece

Components	Material	Plating
Socket Dielectric	PA	-
Socket Outer Contact	Cu	Sn over Nickel
Socket Contact	Cu	Gold over Nickel
Floating Fakra Center Pin	Cu	Gold over Nickel
Floating Fakra Outer Contact / Shielding	Zinc	Sn over Nickel
Floating Fakra Dielectric	LCP	-
Floating Fakra Inner/Outer Sealing	Silicone rubber	-

RELATED Documents	
Drawing, SMT-Socket	2338810-1
Drawing, Floating FAKRA	2338801-1
Customer View Model	On request
Product Specification	On request
Application Specification	On request
Test Specification	N/A
PCB Model	N/A
Product Flyer	TE.com

TE Connectivity's Coaxial Connectivity Solutions at a Glance

Solution	HD Floating Header 2 Piece
Part Number	Floating Connector Terminal 2338801 
	PCB Socket SMT 2338810 
Performance	up to 6 GHz (12 Megapixel, 4k and beyond)
Typical SerDes-Protocols	FPD-Link III/IV GMSL 2/3 MIPI ASA GVIF ...
Misalignment Compensation	Max. ± 0.5 mm in x-, y- and z-direction
Socket \varnothing	5.7 mm
Key Feature	Combines high bandwidth with high misalignment compensation

COAXIAL CONNECTIVITY SOLUTION FOR AUTOMOTIVE CAMERAS

HD Floating Header , 2 piece

TE Connectivity's Coaxial Connectivity Solutions at a Glance

- Floating and fixed header solutions
- Single and multi-PCB support
- High-level of misalignment compensation: ± 0.5 mm in all directions for floating solutions
- Highly compact design
- Broadband connectivity to support 8-12-megapixel HD cameras with up to 60 frames per second
- Waterproofing of IP6K9K
- Support all current and next-generation automotive coaxial SerDes protocols
- Supports phantom power supply
- Compatible to metal and plastic camera housings

Ordering numbers

Part Description	P/N
SMT-Socket	2338801-1
Floating FAKRA	2338810-1
Floating MATE-AX	Coming soon

FOR FURTHER INFORMATION PLEASE CONTACT US

www.TE.com

EUROPE Germany

Product Information Center:
Phone: +800 0440-5100
Fax: +49 6251-133-1988
Email: ConnectedSales@te.com

UNITED STATES United States – Harrisburg

Product Information Center:
Phone: +1 800 522-6752
Fax: +1 717-986-7575
Web: TE.com/customerservice

ASIA / PACIFIC People's Republic of China Hong Kong

Phone: +852 2738-8731
Fax: +852 2735-0243

Shanghai

Phone: +86 21-3398-0000
Fax: +86 21-3398-1999

ASIA / PACIFIC Japan - Kawasaki

Phone: +81 (0)44-844-8050

ASIA / PACIFIC Korea – Seoul

Phone: +82 2-3415-4500 Fax:
+82 2-3486-3810

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