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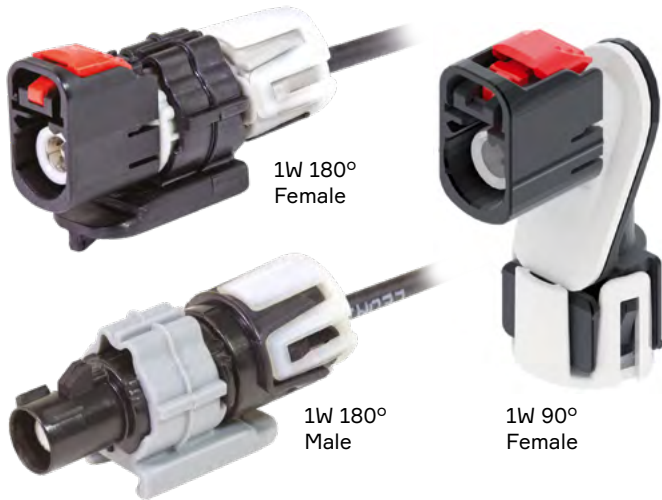
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**Технические характеристики на
системы разъемов для высокоскоростной
модульной передачи данных по витой паре H-MTD,
высокоскоростные разъемы HSF HIGH SPEED
FAKRA, герметичные и негерметичные
компании **APTIV PLC****

HSF HIGH SPEED FAKRA SEALED SERIES



BENEFITS

- Cost effective stamped terminals
- Supports wide range of cable types
- Serviceable design

FEATURES

- Anti-stubbing technology
- Secondary locks on terminals/housings
- Robust co-molded seals
- Clear audible click
- Ergonomic tactile feedback



AVAILABLE CONFIGURATIONS

Cavity Count (ways)	1
Orientation	180°, 90°
Genders	Female, Male
Key/Color Codes	A-I, K-N, Z
Clipslot	USCAR 7 mm Female or Male
Pre-staged CPA	Optional

TECHNICAL CHARACTERISTICS

Performance	SAE-USCAR17 Rev 5
Interface Footprint	SAE-USCAR18 Rev 4
Temperature Range	-40°C to +105°C*
Vibration	Class 1
Sealing	Class 3 (submersion/heavy spray)
50 Ohm Cables	6 GHz / 9 Gb/s*
Non-50 Ohm Cables	200 MHz
VSWR < 3 GHz	1.5:1 max
VSWR > 3 GHz	1.6:1 max
DC Current	2 A max*

* Connector specification. Parameter is cable-dependent.



APPLICATIONS

Antenna/RF
Camera/LVDS
Ethernet, including power over coax

See back page for representative part numbers and packaging dimensions.

SUPPORTED COAXIAL CABLE TYPES

2.8 mm	50 Ohm	RG174LL, RG174LL High Flex
3.0 mm	50 Ohm	1.5 DS
3.2 mm	50 Ohm	RTK031
4.0 mm	50 Ohm	2.0 DS
4.0 mm	75 Ohm	RG59 Mini
5.0 mm	50 Ohm	RG58LL, RG58LL High Flex

About Aptiv

Aptiv is a global technology company that develops safer, greener and more connected solutions enabling the future of mobility.



1 WAY STRAIGHT (180°) DRAWING NUMBERS

Female Terminal Asm	Female Housing No Clipslot No CPA	Female Housing With Clipslot No CPA	Female Housing No Clipslot With CPA	Female Housing With Clipslot With CPA	Male Terminal Asm	Male Housing No Clipslot	Male Housing With Clipslot
							
35013993	33338219	33355520	33338219	33355520	35013992	33355537	33338238

1 WAY RIGHT ANGLE (90°) FEMALE DRAWING NUMBERS

Female Terminal Asm	Female Housing No Clipslot No CPA	Female Housing No Clipslot With CPA
		
35229792	35449094	35339728

PACKAGING DIMENSIONS



Note: units of measurement are millimeters (mm).

Views of sealed connectors showing minimum pass-through hole sizes.

HSF HIGH SPEED FAKRA UNSEALED SERIES



BENEFITS

- Cost effective stamped terminals
- Supports wide range of cable types
- Serviceable design

FEATURES

- Anti-stubbing technology
- Secondary locks on terminals/housings
- Clear audible click
- Ergonomic tactile feedback



AVAILABLE CONFIGURATIONS

Cavity Count (ways)	1, 2
Orientation	180°, 90°
Genders	Female, Male
Key/Color Codes	A-I, K-N, Z
Clipslot	USCAR 7 mm Female or Male
Pre-staged CPA	Optional



APPLICATIONS

Antenna/RF
Camera/LVDS
Ethernet, including power over coax

See back page for representative part numbers and packaging dimensions.

TECHNICAL CHARACTERISTICS

Performance	SAE-USCAR17 Rev 5
Interface Footprint	SAE-USCAR18 Rev 4
Temperature Range	-40°C to +105°C*
Vibration	Class 1
Sealing	Class 1 Unsealed
50 Ohm Cables	6 GHz / 9 Gb/s*
Non-50 Ohm Cables	200 MHz
VSWR < 3 GHz	1.5:1 max
VSWR > 3 GHz	1.6:1 max
DC Current	2 A max*

* Connector specification. Parameter is cable-dependent.

SUPPORTED COAXIAL CABLE TYPES

2.8 mm	50 Ohm	RG174LL, RG174LL High Flex
3.0 mm	50 Ohm	1.5 DS
3.2 mm	50 Ohm	RTK031
4.0 mm	50 Ohm	2.0 DS
4.0 mm	75 Ohm	RG59 Mini
5.0 mm	50 Ohm	RG58LL, RG58LL High Flex

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1 WAY STRAIGHT (180°) DRAWING NUMBERS

Female Terminal Asm	Female Housing No Clipslot No CPA	Female Housing With Clipslot No CPA	Female Housing No Clipslot With CPA	Female Housing With Clipslot With CPA	Male Terminal Asm	Male Housing No Clipslot	Male Housing With Clipslot
							
35013993	33340308	33340308	33340308	33340308	35013992	33340362	33340362

2 WAY STRAIGHT (180°) DRAWING NUMBERS

Female Terminal Asm	Female Housing No Clipslot No CPA	Female Housing With Clipslot No CPA	Female Housing No Clipslot With CPA	Female Housing With Clipslot With CPA	Male Terminal Asm	Male Housing No Clipslot	Male Housing With Clipslot
							
35013993	33340377	33340377	33340377	33340377	35013992	33340408	33340408

1 WAY RIGHT ANGLE (90°) FEMALE DRAWING NUMBERS

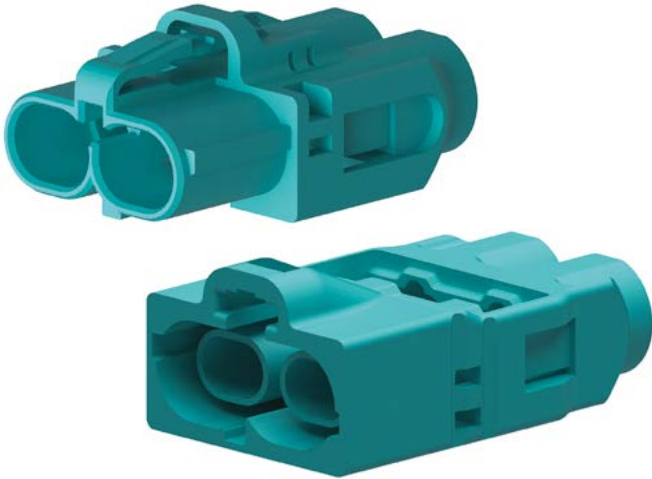
Female Terminal Asm	Female Housing No Clipslot No CPA	Female Housing With Clipslot No CPA
		
33354523	33341062	33340434

PACKAGING DIMENSIONS



Note: units of measurement are millimeters (mm).

H-MTD[®] SERIES



H-MTD[®] Housing 2 Port Unsealed
Female & Male

BENEFITS

- Fully shielded 2 wire data connectivity solution
- Interface, PCB and cavity compatible to Rosenberger H-MTD[®]
- High speed, up to 20 Ghz, various cable design, optional Connector Position Assurance (CPA)

FEATURES

- Basic high speed data solution for future autonomous driving and infotainment application
- Outstanding performance for differential pair signal transmission
- Stable performance across various temperatures & frequencies
- Optimized insertion force
- Improved retention force

H-MTD[®] is a registered trademark of Rosenberger Hochfrequenztechnik GmbH & Co.



AVAILABLE CONFIGURATIONS

Cavity count (ports)	1, 2, 4, 6
Genders	Female, Male
Sealing Type	Cable Sealed
Indexes	A, B, C, D and Z
TPA	Yes
CPA	Optional



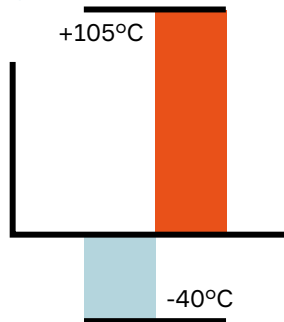
ELECTRICAL CHARACTERISTICS

Frequency Range	DC to 1 GHz
Impedance	100 Ω
Return Loss	≥ 30 dB, DC to 1 GHz TBD, DC to 20 GHz
Power Current	≤ 1,5 A DC
Cable Type STP	G&G X9305, Dacar 686-3, Dacar 647-4*

* other cables can be investigated, please consult us.



TEMPERATURE



TECHNICAL INFO

- VIBRATION CLASS**
 - SC 1 body unsealed
 - SC 2 body sealed

- SEALING CLASS**
 - LV214 or DIN60329 IPX9K
 - USCAR V1 chassis profile

- CHANNEL SPECIFICATION**
 - IEEE 802.3bp (1000BASE-T1)
 - IEEE 802.3ch (NGAUTO)
 - PCI E (in preparation)



APPLICATIONS

- ECU for Autonomous driving
- Radar
- Lidar





See back page for representative part numbers and packaging dimensions.






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Aptiv is a global technology company that develops safer, greener and more connected solutions enabling a more sustainable future of mobility.








HOUSINGS




Configuration	1 port unsealed female	2 port unsealed female	4 port unsealed female	6 port unsealed female
				
Part numbers	Consult us	Consult us	Consult us	Consult us
Codes available	A, B, C, D, Z	A, B, C, D, Z	A, B, C, D, Z	A, B, C, D, Z
Dimensions (mm)	11 x 12.7 x 28.6	19 x 12.7 x 28.6	19 x 18.7 x 28.6	27 x 18.7 x 28.6

Configuration	1 port sealed female	1 port unsealed + 6x0.64 female	2 port unsealed + 6x0.64 female	1 port unsealed male	2 port unsealed male
					
Part numbers	Consult us	Consult us	Consult us	Consult us	Consult us
Codes available	A, B, C, D, Z	A, B, C, D, Z	A, B, C, D, Z	A, B, C, D, Z	A, B, C, D, Z
Dimensions (mm)	13.9 x 16 x 33.1	20.3 x 12.7 x 28.6	28.3 x 12.7 x 28.6	20.2 x 12.7 x 28.6	28.3 x 13.1 x 28.6

HEADERS

Configuration	1 port unsealed male	2 port unsealed male	4 port unsealed male	6 port unsealed male	1 port sealed male
					
Part numbers	Consult us	Consult us	Consult us	Consult us	Consult us
Codes available	A, B, C, D, Z	A, B, C, D, Z	A, B, C, D, Z	A, B, C, D, Z	A, B, C, D, Z
Dimensions (mm)	11 x 15.2 x 21.8	19 x 15.2 x 21.8	19 x 21.5 x 21.8	26.7 x 21.5 x 21.8	32.6 x 20.1 x 23

CABLE ASSEMBLY

Configuration	1 port housing female - female	1 port housing female - male	AMEC STP - Mixed cable assembly
			
Part numbers	Consult us	Consult us	Consult us
Length	min 405 ± 5	min 405 ± 5	min 405 ± 5
Cable Type	All specified cables	All specified cables	Dacar 647-4

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