

KMA01 Series

RF Coaxial Connector for Video Transmission & Antenna Communication



Space-Saving



Wide Variation



6 GHz



Product Page
<https://www.hirose.com/en/product/series/KMA01>

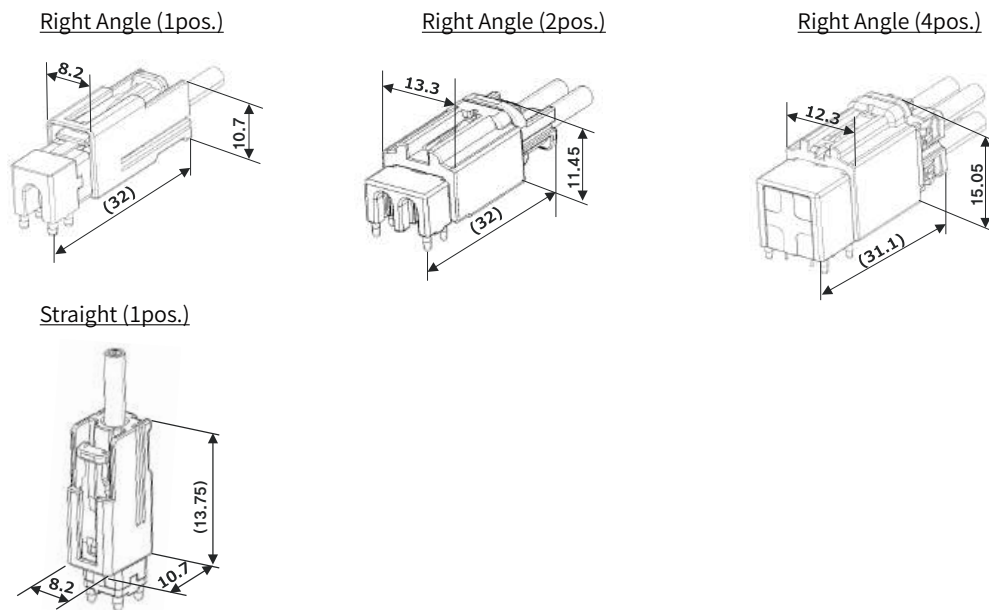
Features

1. Wide Range of Low-Profile Coaxial Connector Variations

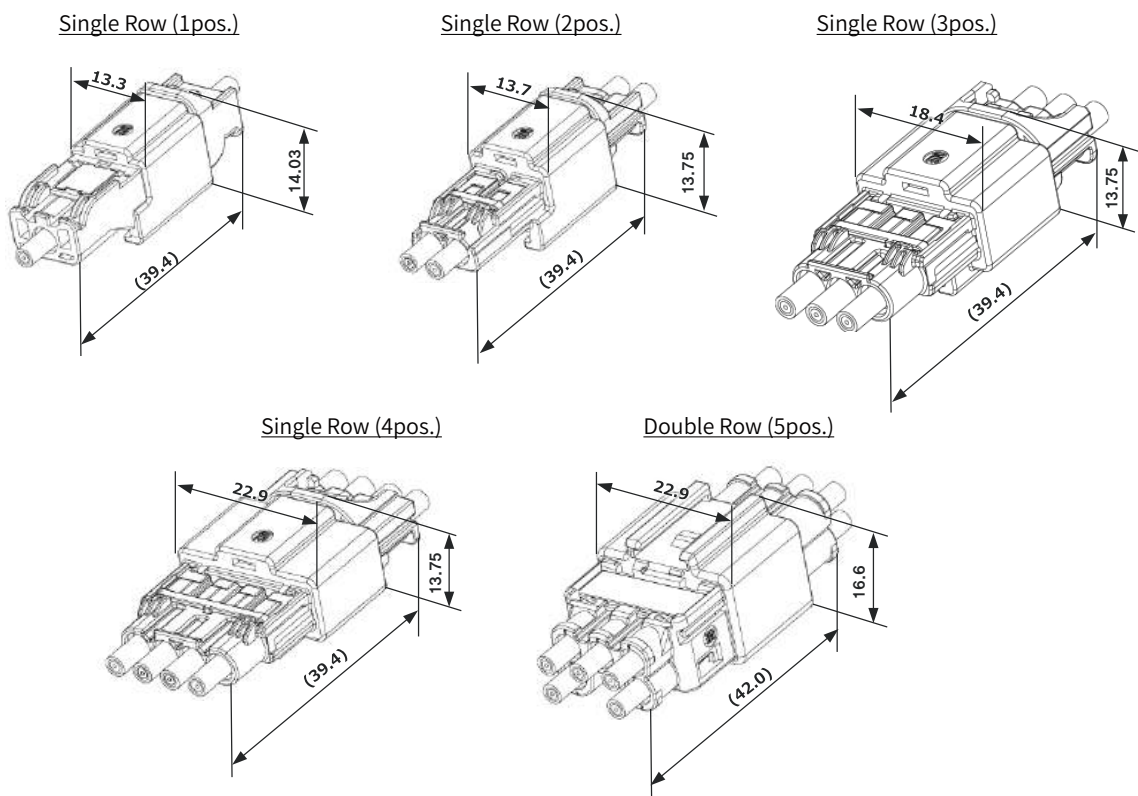
- Wire to board and wire to wire types

Wire to Board

Unit:mm



Wire to Wire (In-line Type)



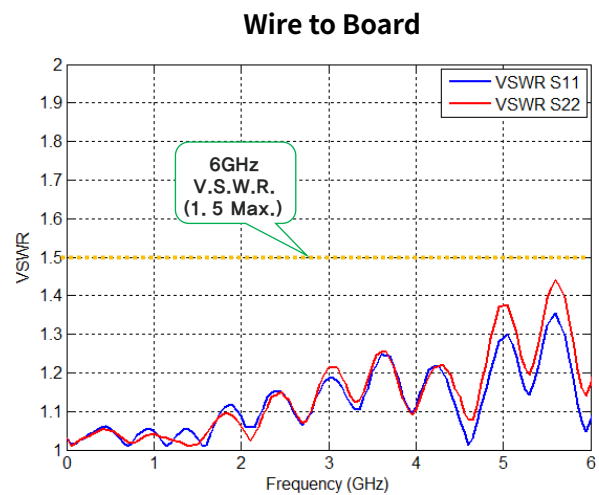
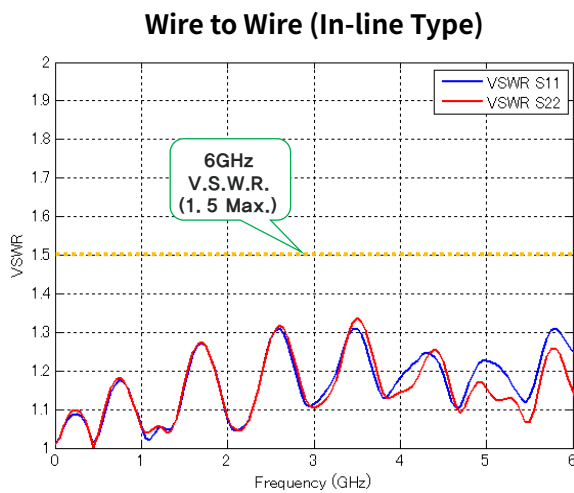
Note: The above mating diagram is for reference only.

2. Designed to Meet Strict Automotive Requirements

This is a highly reliable connector that meets stringent automotive requirements such as vibration resistance and heat resistance.

3. Excellent High-Frequency Performance

- V.S.W.R. 1.5 Max. (0 to 6GHz)



Note: The above figures and tables are for reference only.

4. Automotive-Grade Connector for In-Vehicle Systems

- Infotainment, cameras, and antennas

3. Housing Structure Compatible with Ø3.0 Cable

Product Specifications

Impedance	50Ω±5Ω
V.S.W.R.	1.5 Max. (0 to 6GHz)
Rated Current	1A
Operating Temperature (Note 1)	-40 to +105°C

Items	Specifications	Conditions
Contact Resistance	Initial: 50mΩ Max After testing: 100mΩ Max	Measured at 20mV AC, 1kHz
Insulation Resistance	100MΩ Min.	Measured at 500V DC
Withstanding Voltage	No electrical discontinuity.	500V AC for 1 min.
Mating Durability	Contact Resistance: 100mΩ Max. Insulation Resistance: 100MΩ Min.	30 cycles
Temperature Cycles	Contact Resistance: 100mΩ Max. Insulation Resistance: 100MΩ Min.	Temperature: -40±2°C → +105±2°C Time: 30 → 30 min. for 500 cycles

Note 1: Includes temperature rise caused by current flow.

Note 2: Please refer to the specification sheet for details

Materials / Finish

Product	Component		Material	Finish and Color
Receptacle	Housing		PA	UL94V-0 / Black, Gray
	Contact		Brass	Contact: Gold Plated Over Nickel Under Plating Lead: Tin Plated Over Nickel Under Plating
	Insulator		PA	UL94V-0 / Black
	External Contact		Brass	Tin Plating
	Shell		ZnDC2	Tin Plated Over Nickel Under Plating
	Shield		ZnDC2	Tin Plated Over Nickel Under Plating
Plug & Jack	Housing		PBT	UL94V-0 / Black, Gray
	TPA		PBT	UL94V-0 / Orange
	Contact		Copper Alloy	Contact: Gold Plated Over Nickel Under Plating Others: Tin Plated Over Nickel Under Plating
	Sleeve		Brass	Tin Plating
	Shell Assy [*]	Shell	Copper Alloy	UL94V-0 / Tin Plating
		Insulator	PBT	UL94V-0 / Gray

* TPA(Terminal Position Assurance)

TPA is a functional concept used in electrical and automotive connectors.
It refers to a secondary locking mechanism that ensures

Product Number Structure

Please utilize the below part number chart when selecting.

Receptacle

KMA01 - # DP - ## DS /B (800)
① ② ③ ④ ⑤ ⑥ ⑦

① Series Name	KMA01	⑤ Mounting Type	DS: Right Angle THT V: Straight SMT
② No. of Pos.	1, 2, 4	⑥ Color	B: Black
③ Connector Type	P: Single Row DP: Double Row	⑦ Specification	800: Standard
④ Pitch	4.5mm		

Plug Housing

KMA01 - # DS - ## HA /B (800)
① ② ③ ④ ⑤ ⑥ ⑦

① Series Name	KMA01	⑤ Assy Type	HA: Housing Assy' (Housing + TPA*)
② No. of Pos.	1, 2, 4	⑥ Color	B: Black GR: Gray
③ Connector Type	P: Single Row DP: Double Row	⑦ Specification	800: Standard
④ Pitch	4.5mm		

Jack & Plug [In-line Type]

KMA01 - # DP - ## HA (01) /B (800)
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Series Name	KMA01	④ Pitch	4.5: 4.5mm (1-4pos.) 5.5: 5.5mm (5pos. Only)
② No. of Pos.	1, 2, 3, 4, 5	⑤ Assy Type	HA: Housing Assy' (Housing + TPA*)
③ Connector Type	[Jack] P: Single Row DP: Double Row [Plug] S: Single Row DS: Double Row	⑥ Serial No.	(01): 1pos. None: 2-5pos.
		⑦ Color	B: Black GR: Gray
		⑧ Specification	800: Standard

* TPA(Terminal Position Assurance)
TPA is a functional concept used in electrical and automotive connectors.
It refers to a secondary locking mechanism that ensures

Product Number Structure

[Common Product]

Shell Assy'

KMA01 - **3.0** **S** - **SA** **(03)** **(800)**

1

2

3

4

6

Crimp Sleeve

KMA01 - **3.0** - **SL** **(03)** **(800)**

1

2

4

6

Crimp Contact

KMA01 - **3.0** - **SCF** **(800)**

1

2

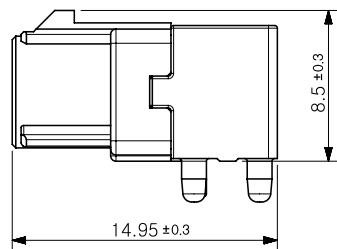
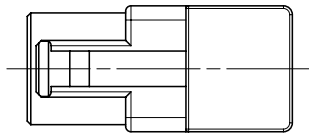
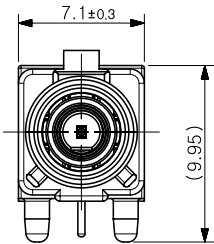
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1 Series Name	KMA01	4 External Contact Shape	SA: Shell Assy' SL: Sleeve
2 Wire Size	1.5D Equivalent	5 Contact Shape	SCF: Female Contact PCF: Male Contact
3 Shell Type	S: Female P: Male	6 Specification	800: Standard

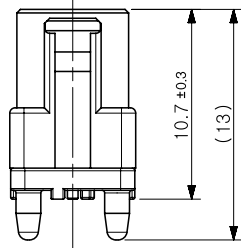
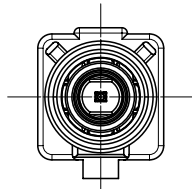
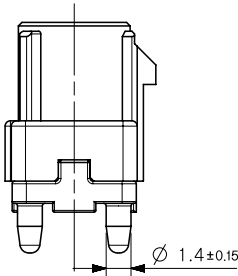
Receptacle

Right Angle (1pos.)



Part No.	HRS No.	No. of Pos.	Purchase Unit
KMA01-1P-DS/B(800)	CL0480-1410-0-00	1	400pcs per reel

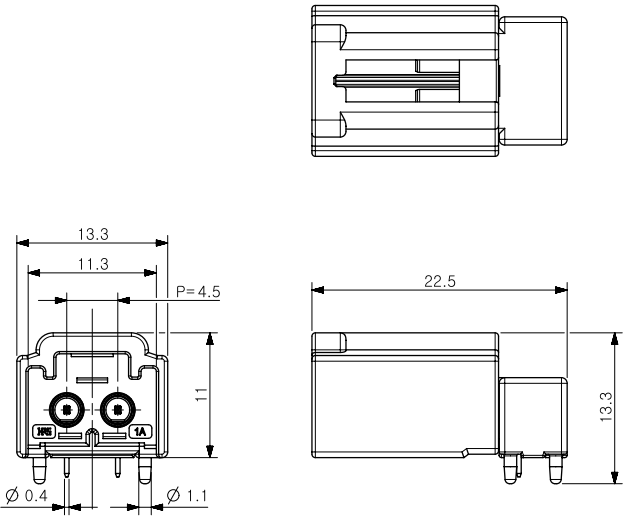
Straight (1pos.)



Part No.	HRS No.	No. of Pos.	Purchase Unit
KMA01-1P-V/B(800)	CL0480-1154-0-00	1	300pcs per reel

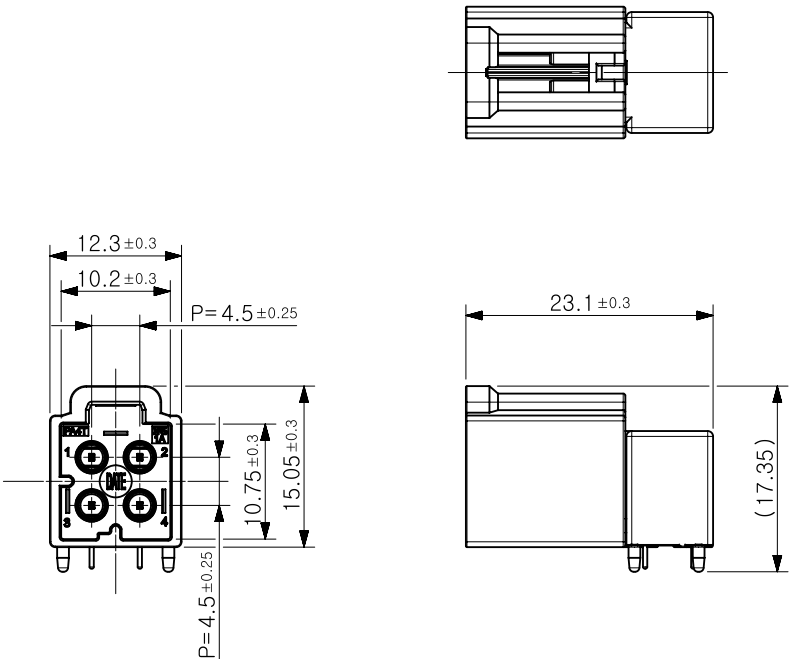
Receptacle

Right Angle (2pos.)



Part No.	HRS No.	No. of Pos.	Purchase Unit
KMA01-2P-4.5DS/GR(800)	CL0480-1414-0-00	2	320pcs per reel

Right Angle (4pos.)



Part No.	HRS No.	No. of Pos.	Purchase Unit
KMA01-4DP-4.5DS/B(800)	CL0480-1416-0-00	4	250pcs per reel

Plug

The product consists of four parts.
(Housing, Shell Assy', Crimp Sleeve, Crimp Contact)



Straight (1pos.)



Straight (2pos.)



Straight (4pos.)

● Housing

Part No.	HRS No.	No. of Pos.	Purchase Unit
KMA01-1S-HA/B(800)	CL0480-1409-0-00	1	2,000pcs per bag
KMA01-2S-4.5HA/GR(800)	CL0480-1148-0-00	2	
KMA01-4DS-4.5HA/B(800)	CL0480-1415-0-00	4	

● Shell Assy'

Part No.	HRS No.	Purchase Unit
KMA01-3.0S-SA(03)(800)	CL0480-1412-0-00	2,000pcs per bag

● Crimp Sleeve

Part No.	HRS No.	Purchase Unit
KMA01-3.0-SL(03)(800)	CL0480-1411-0-00	3,000pcs per reel

● Crimp Contact

Part No.	HRS No.	Purchase Unit
KMA01-3.0SCF(800)	CL0480-1205-0-00	10,000pcs per reel

Note: For more information on cable assemblies, please contact a Hirose representative.

Jack [In-line Type]

The product consists of four parts.
(Housing, Shell Assy', Crimp Sleeve, Crimp Contact)



Shown with crimp contact inserted.

● Housing

Part No.	HRS No.	No. of Pos.	Purchase Unit
KMA01-1P-HA(01)/GR(800)	CL0480-1204-0-00	1	2,000pcs per bag
KMA01-2P-4.5HA/GR(800)	CL0480-1149-0-00	2	
KMA01-3P-4.5HA/GR(800)	CL0480-1151-0-00	3	
KMA01-4P-4.5HA/GR(800)	CL0480-1406-0-00	4	
KMA01-5DP-5.5HA/GR(800)	CL0480-1408-0-00	5	

● Shell Assy'

Part No.	HRS No.	Purchase Unit
KMA01-3.0P-SA(03)(800)	CL0480-1413-0-00	2,000pcs per bag

● Crimp Sleeve

Part No.	HRS No.	Purchase Unit
KMA01-3.0-SL(03)(800)	CL0480-1411-0-00	3,000pcs per reel

● Crimp Contact

Part No.	HRS No.	Purchase Unit
KMA01-3.0PCF(800)	CL0480-1206-0-00	10,000pcs per reel

Note: For more information on cable assemblies, please contact a Hirose representative.

Plug [In-line Type]

The product consists of four parts.
(Housing, Shell Assy', Crimp Sleeve, Crimp Contact)



Shown with crimp contact inserted.

● Housing

Part No.	HRS No.	No. of Pos.	Purchase Unit
KMA01-1S-HA(01)/GR(800)	CL0480-1404-0-00	1	2,000pcs per bag
KMA01-2S-4.5HA/GR(800)	CL0480-1148-0-00	2	
KMA01-3S-4.5HA/GR(800)	CL0480-1150-0-00	3	
KMA01-4S-4.5HA/GR(800)	CL0480-1405-0-00	4	
KMA01-5DS-5.5HA/GR(800)	CL0480-1407-0-00	5	

● Shell Assy'

Part No.	HRS No.	Purchase Unit
KMA01-3.0S-SA(03)(800)	CL0480-1412-0-00	2,000pcs per bag

● Crimp Sleeve

Part No.	HRS No.	Purchase Unit
KMA01-3.0-SL(03)(800)	CL0480-1411-0-00	3,000pcs per reel

● Crimp Contact

Part No.	HRS No.	Purchase Unit
KMA01-3.0SCF(800)	CL0480-1205-0-00	10,000pcs per reel

Note : For more information on cable assemblies, please contact a Hirose representative.

Usage Precautions

1. Forcing the connector out might cause damage.
If challenging to remove, gently press down once and then release the lock.
2. Always disconnect the power before reseating the connector.
3. Avoid touching the contact area when the power is active, as it's hazardous.
4. For harnessing guidelines, please consult a Hirose representative.

While Taking into Consideration

Specifications mentioned in this catalog are reference values.

When considering to order or use this product, please review the Drawing and Product Specifications sheets.

Use an appropriate cable when using the connector in combination with cables.

If considering usage of a non- specified cable, please contact your sales representative.

If assembly process is done by jigs & tools which are not identified by Hirose, the warranty of the product may be affected.

If considering usage for below mentioned applications, please contact your sales representative.

In cases where the application will demand a high level of reliability, such as automotive, medical instruments, Public infrastructure, aerospace/ defense etc. Hirose must review before assurance of reliability can be given.

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