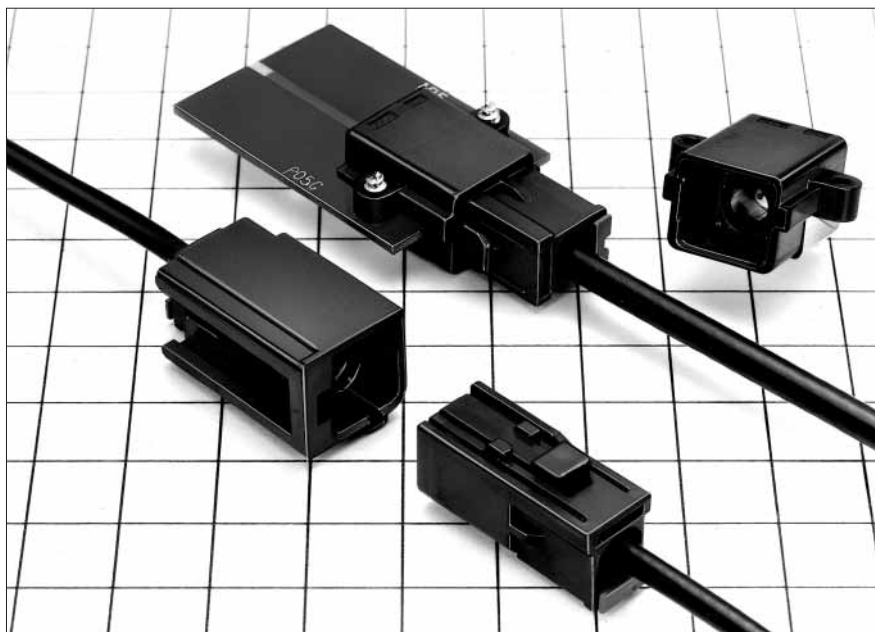


## Coaxial cable connection of Antennas, Sensors, and Communication Trunk Lines

# PO5G Series

## — 5.8 GHz Mobile Coaxial Connectors —



### ■ Features

- Lock-release latching system
- Excellent High Frequency Performance
  - DC to 3 GHz: V.S.W.R. of 1.3 max.
  - 3 to 6 GHz: V.S.W.R. of 1.5 max.
- Suits 50 ohms polyethylene foam insulated coaxial cable.
- The board-side connector is of the board cut-out type.

### ■ Applications

ETC, GPS, and VICS.

## PO5G Series

### Specifications

Rating	Characteristic impedance: 50 ohms Rating frequency: DC to 6 GHz	Operating temperature range: -40°C to +105°C Operating humidity: 90% max.
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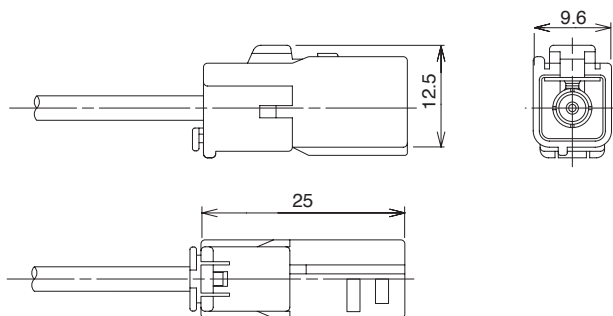
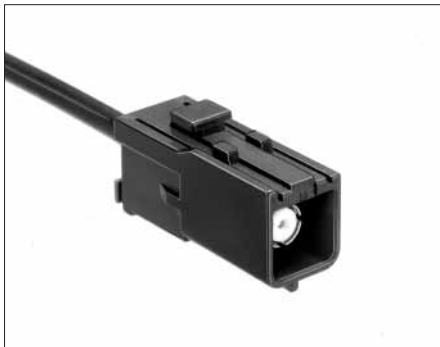
Rating	Specification	Conditions
Contact resistance	Center: 30 m ohms Outside: 30 m ohms	100 mA max.
Insulation resistance	100 M ohms min.	500 V DC
Withstanding voltage	No flashover or insulation breakdown	650 V AC / one minute
V.S.W.R.	1.3 max. 1.5 max.	DC to 3 GHz 3 to 6 GHz

Note: 1.6max. (3 to 6GHz) for jacks

### Materials

Part	Material	Finish
Shell	Phosphor bronze	Tin plating
Insulator	PBT	94V-0 (White)
Housing	PBT	94HB (Black)
Retainer	PBT	94V-0 (Gray)
Contacts	Phosphor bronze	Gold plating
Ground plate	Phosphor bronze	Tin plating

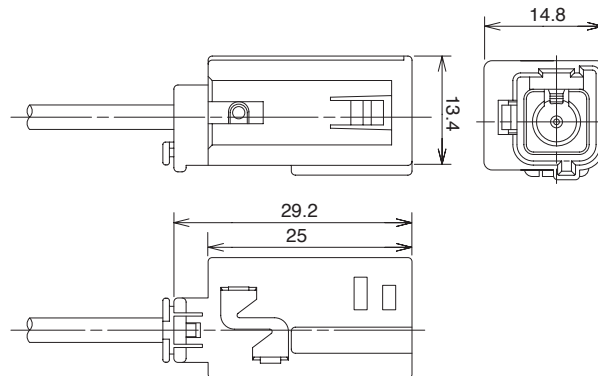
● Plugs



\* Completed with 3 products

Item	Part Number	CL No.	Remarks	RoHS
Straight plug for 1.5D cable	PO5G-P-1.5DHQS	312-0192-8	Applicable cable 1.5DS-GXC-SP: Manufactured by Sumitomo Electric Industries, Ltd.	YES
	PO5G-CONTACT/F1.5	312-0195-6	Female center contacts 10,000 pcs. per reel	
	GT5-1P/S-R	755-0006-2	—	
Straight plug for 2.5D cable	PO5G-P-2.5GXC	312-0198-4	Applicable cable 2.5DS-GXC(3.8): Manufactured by Sumitomo Electric Industries, Ltd.	
	PO5G-CONTACT/F2.5	312-0203-2	Female Inner contacts 10,000 pcs. per reel	
	GT5-1P/S-R	755-0006-2	—	

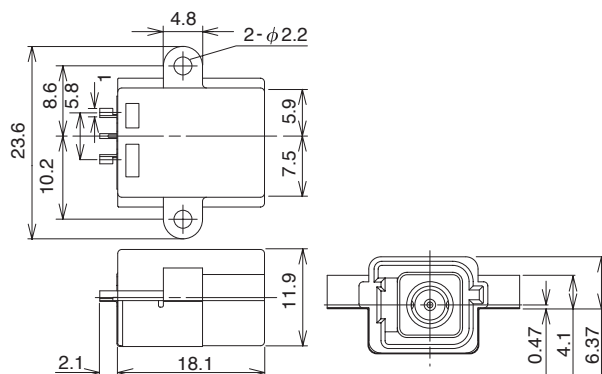
● Jacks (for in-line use)



\* Completed with 3 products

Item	Part Number	CL No.	Remarks	RoHS
Straight jack for 1.5D cable	PO5G-J-1.5DHQS(40)	312-0200-4-40	Applicable cable 1.5DS-GXC-SP: Manufactured by Sumitomo Electric Industries, Ltd.	YES
	PO5G-CONTACT/M1.5	312-0201-7	male center contacts 10,000 pcs. per reel	
	GT5-1P/S-R	755-0006-2	—	

● Receptacles



Part Number	CL No.	RoHS
P05G-LR-PC(40)	312-0191-5-40	YES

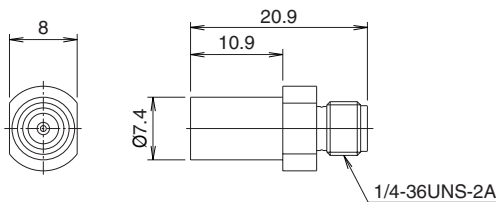
Coaxial cable connection of Antennas, Sensors, and Communication Trunk Lines  
 GT 5  
 GT 13  
 GT 16  
**PO5G**  
 GT 11  
 GT 14  
 GT 17  
 GT 19  
 GT 3  
 GT 6W  
 GT 7  
 GT 10  
 GT 18W  
 GT 15  
 GT 8  
 GT 9  
 GT 25

PO5G Series

Coaxial cable connection of Antennas, Sensors, and Communication Trunk Lines  
 GT 5  
 GT 13  
 GT 16  
 PO5G  
 GT 11  
 GT 14  
 GT 17  
 GT 19  
 GT 3  
 GT 6W  
 GT 7  
 GT 10  
 GT 18W  
 GT 15  
 GT 8  
 GT 9  
 GT 25

## ■ Conversion Adapter

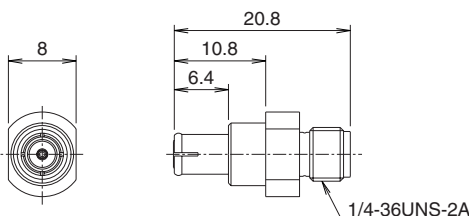
### ● SMA Conversion Adapter (coupling portion: PO5G side jack - SMA side jack)



Note: The adapter does not have a lock portion and thus can only be used for performance measurements.

Part Number	HRS No.	RoHS
PO5GJ-HRMJ	CL311-0329-4	YES

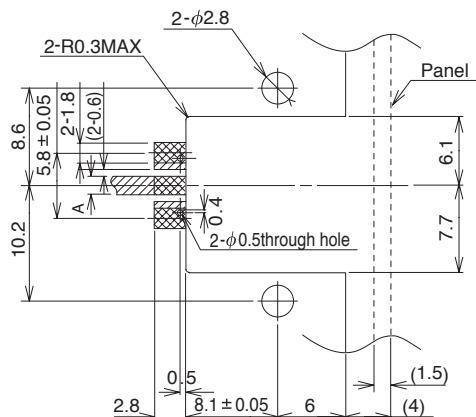
### ● SMA Conversion Adapter (coupling portion: PO5G side plug - SMA side jack)



Note: The adapter does not have a lock portion and thus can only be used for performance measurements.

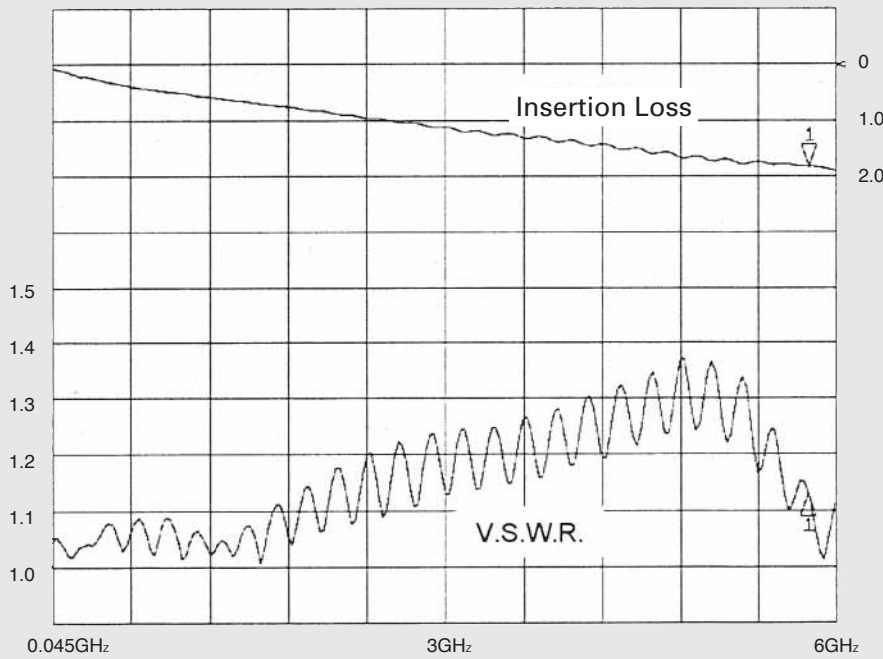
Part Number	HRS No.	RoHS
PO5GP-HRMJ	CL311-0330-3	YES

### ◆ Recommended PCB Mounting Pattern

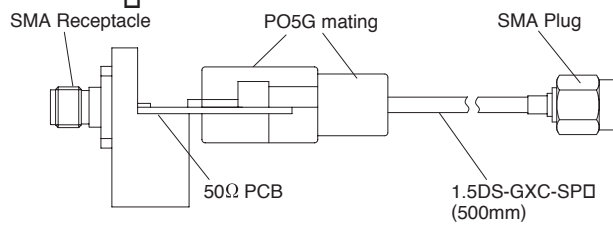


\* Set dimension A to give 50Ω characteristics.  
 Reference example: Glass epoxy t = 1.0 (ε = 4.8) A = 1.65

### High Frequency Characteristics Typical



### Measurement System



Coaxial cable connection of Antennas, Sensors, and Communication Trunk Lines

- GT 5
- GT 13
- GT 16
- PO5G**
- GT 11
- GT 14
- GT 17
- GT 19
- GT 3
- GT 6W
- GT 7
- GT 10
- GT 18W
- GT 15
- GT 8
- GT 9
- GT 25