

SMC Type Coaxial Connector

27DS Series



CONFORMING STANDARD

MIL-PRF-39012

FEATURE

- ◆ 27DS series are connectors produced based on SMC type (Sub miniature type C) specified in MIL-PRF-39012.
- ◆ Super small size coaxial cable connectors for 50 Ω group corresponding to minimization of communication equipment.
- ◆ Recommendation coupling torque : 24.5 ~ 35.3 N·cm

SPECIFICATIONS

Characteristic Impedance	50 Ω
Rated Voltage	335VAC(r.m.s.)
Dielectric Withstanding Voltage	1,000V AC(r.m.s.) for 1 minute
Insulation Resistance	1,000M Ω min. at 500V DC
Contact Resistance	6m Ω max.
V.S.W.R.	1.2 max. at DC to 1GHz
Operating Temperature	-40 ~ +85°C

* The specifications are typical but may not apply to all connectors. Please check the specifications on each item with its drawing from us when you use.

MATERIAL/FINISH

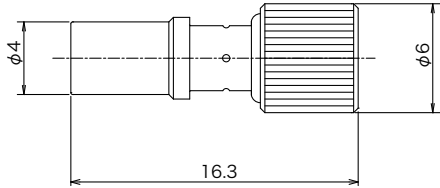


Item	Material / Finish
Shell (Body)	Copper Alloy / Ni or Au Plating
Contact (Male)	Copper Alloy / Au Plating
Contact (Female)	Copper Alloy / Au Plating
Insulator	PTFE

※ Please ask us for the cable assemblies to assure its performance.

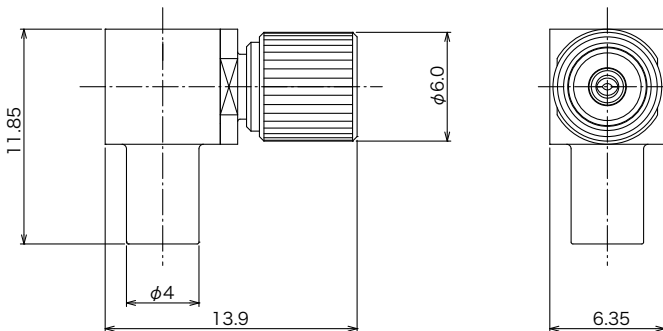
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▶ Plug



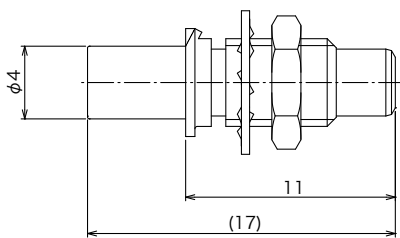
Part Number	Applicable Cable	Finish		Assembly Instruction	Crimp Tool
		Outer Conductor	Center Conductor		
27DS-P-1.5-CF	1.5D-QEV	Ni	Au	1	CR-H-1101
	1.5D-2V				
27DS-P-196U-CF	RG-196A/U	Ni	Au	1	CR-H-1101

▶ Right Angle Plug



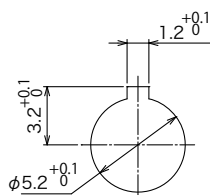
Part Number	Applicable Cable	Finish		Assembly Instruction	Crimp Tool
		Outer Conductor	Center Conductor		
27DS-LP-1.5-CF	1.5D-QEV	Ni	Au	2	CR-H-1101
	1.5D-2V				
27DS-LP-196U-CF	RG-196A/U	Ni	Au	2	CR-H-1101

▶ Bulkhead Jack



Part Number	Applicable Cable	Finish		Assembly Instruction	Crimp Tool
		Outer Conductor	Center Conductor		
27DS-BJ-1.5-CF	1.5D-QEV	Ni	Au	1	CR-H-1101
	1.5D-2V				

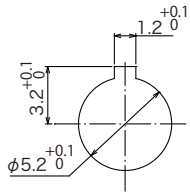
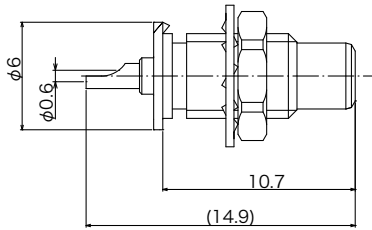
Panel Thickness : 3.0 Max.



Panel Mounting Hole

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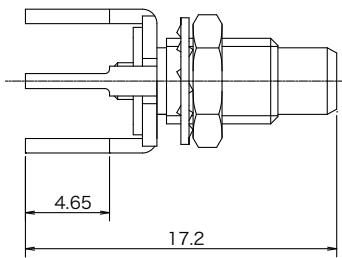
▶ Receptacle



Panel Mounting Hole

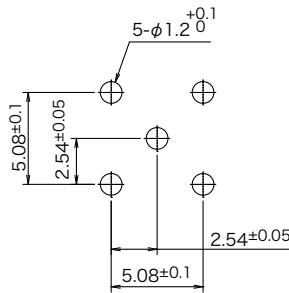
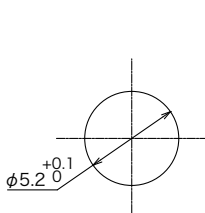
Part Number	Finish	
	Outer Conductor	Center Conductor
27DS-BR-CF	Ni	Au

Panel Thickness : 2.8 Max.



Part Number	Finish	
	Outer Conductor	Center Conductor
27DS-R-PC-CF	Ni	Au

Panel Thickness : 3.0 Max.

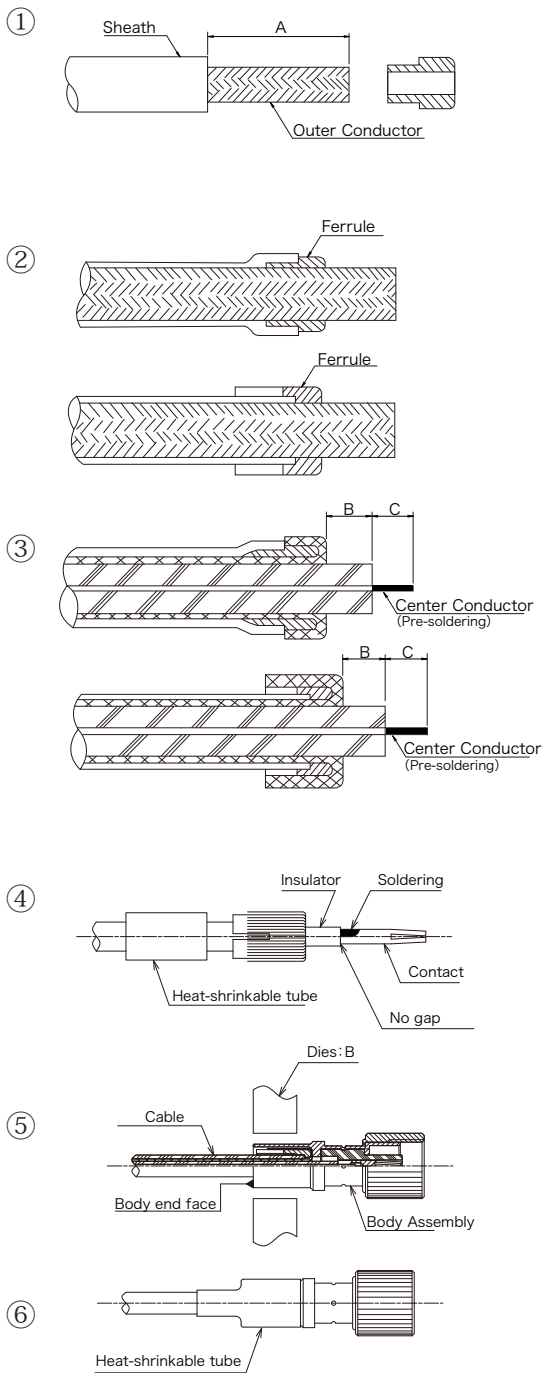


Panel Mounting Hole

PCB Mounting Dimensions

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▶ Assembly Instruction ((1))



① Cut the cable as fig.1.

Cut off in the A size from an end face of a cable. Please be careful to not damage the outer conductor.

② Insert Ferrule

- 1) At 1.5D-2V and 1.5D-QEV, an application cable puts a ferrule in inside outside covering.
- 2) Application cable is RG-196A/U, a ferrule inserts until bump against covering outside the cable.

③ Stretched to loosen the cable braid, covers the extent to Trim the outer ferrule wrap.

Next Dimension B, C (see Table interfere dimension) so that, except off to adhere to the wound center conductor of the cable insulation. Central Conductor soldered.

④ Soldering of Central Contact

Solder up the contact with the center conductor. Please be careful to not deform the insulator by heat. When the solder is stick out, please shave the extra solder. No gap between contact and insulator of the cable. Let the cable through the shrinkage tube.

⑤ Insert the assembly into the body until it hits those assembled, make sure the position of the contact center. Crimp the edge according to dies assembled body and face as shown on left and then using a special tool.

⑥ To protect a cable attaching portion at the end, please cover, heat and fix heat-shrinkable tubing like a left figure.

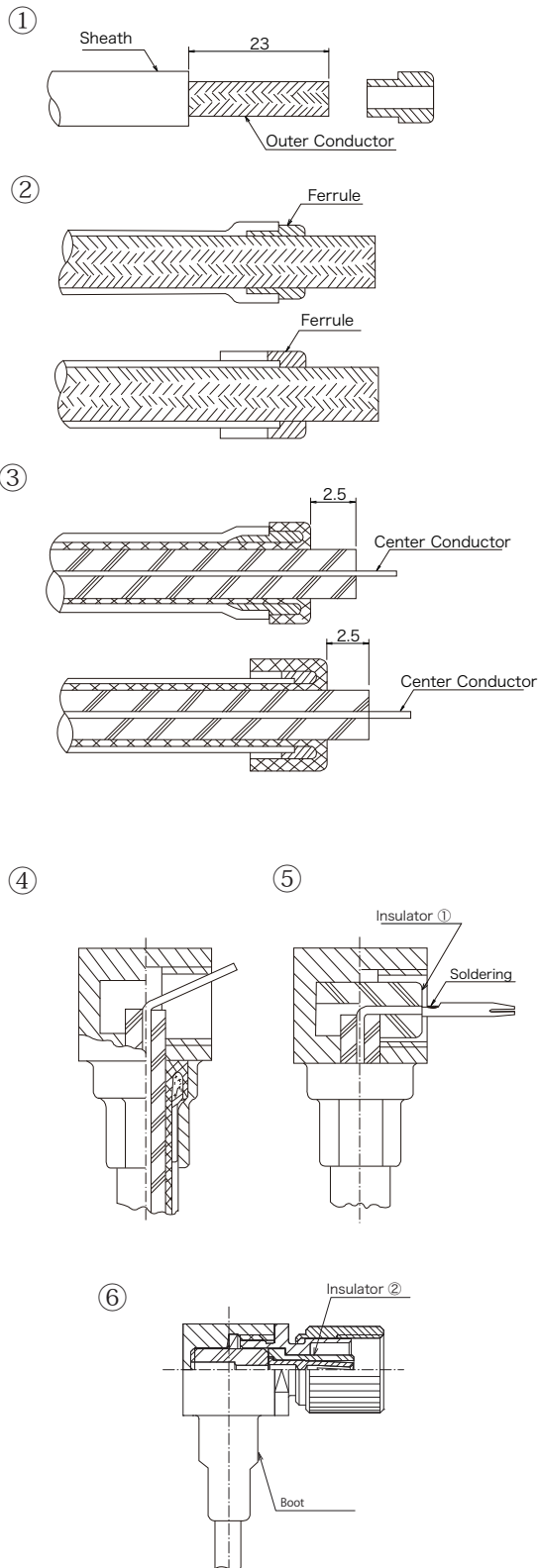
■ Dimension table interfere

Part Number	A	B	C ⁰ _{-0.4}
27DS-P-1.5-CF	6.4	2.4	1.6
27DS-P-196U-CF	5.4	2.4	1.6
27DS-BJ-1.5-CF	8.0	2.4	2.4

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<https://www.connector.fujikura.com>

▶ Assembly Instruction (2)



① Remove outer covering.

Insert the boot into the cable and cut the cable as fig.1.
Please be careful to not damage the outer conductor.

② Insert Ferrule

(1) 1.5D-2V and 1.5D-QEV, an application cable puts a ferrule in inside outside covering.

(2) Application cable is RG-196A/U, a ferrule inserts until bump against covering outside the cable.

③ Stretched to loosen the cable braid, covers the extent to Trim the outer ferrule wrap.

Central Conductor isn't damaged, the insulator of the cable is cut and removed like next becoming the size as fig.3.

④ Put a thermal contraction tube through the of the cable Put the tip of the center conductor through the hole of the main body of connector. The part where covered a ferrule with and braiding is inserted until bump in the connector body, crimp in the same way as the above using an exclusive tool.

⑤ Insulator(1) is shown into a central conductor of a cable and inserted in the connector, and makes sure that the of the Insulator(1) will fit into the insulator of the cable.

sure that pulling the loose end of the center conductor length of 1.5mm to be the size of the tip Cut the pre-soldering.

Central contact is forced and pays attention and solders so that I may hit an insulator(1) closely.

⑥ Maintain insulator ② for a contact; is the main body of combination department on the top protests and tightens it with a spanner firmly.

Cover it with a heatshrinkage Boot like a left-hand figure and fix it.