

SMC (**S**ub-**M**iniature-**C**) series is similar in design as the SMB, but supplied with a threaded coupling interface rather than a snap on interface. Along with the screw coupling, it gets tighter control of the contact and insulator locations. This makes the SMC suitable for use in high vibration environments. This series is controlled at 50 ohms impedance, and it can be operated up to the frequencies of 10GHz. The SMC range is suitable for the standard ranges of flexible & semi-rigid cables, and it is also available as a PCB mounted version.

*microwave telephony *non-military telecommunications

USA: MIL-C-39012

Technical drawings of two types of ball valves, showing dimensions in inches and millimeters.

Left Drawing (Standard Ball Valve):

- Overall Length: 5.92 MAX. (233 MAX.)
- Handle Length: 3.10 MAX. (122 MAX.)
- Ball Diameter: $\varnothing 2.06$ MAX. ($\varnothing 0.081$ MAX.)
- Seat Diameter: $\varnothing 3.73$ MAX. ($\varnothing 0.147$ MAX.)
- Thread: 0-32UNF-2B
- Body Length: 3.04 MAX. (134 MAX.)
- Seat Length: 3.04 MAX. (134 MAX.)

Right Drawing (High-Pressure Ball Valve):

- Overall Length: 5.94 MAX. (234 MAX.)
- Handle Length: 5.94 MAX. (234 MAX.)
- Ball Diameter: $\varnothing 0.25$ MAX. ($\varnothing 0.010$ MAX.)
- Seat Diameter: 3.40 MAX. (134 MAX.)
- Thread: 10-32UNF-2A
- Body Length: 0.61 MAX. (0.024 MAX.)
- Seat Length: 3.40 MAX. (134 MAX.)
- Ball Length: 0.25 MAX. (0.010 MAX.)
- Seat Length: 3.40 MAX. (134 MAX.)

JACK

SMC Series						
PLUG				JACK		
	Minimum	Maximum		Minimum	Maximum	
				0.48<.019>	0.53<.021>	A
				3.12<.123>	3.83<.133>	B

33



Materials :

Connector part	Material	Finish
Bodies	Brass	Nickel or Gold
Center Contact	Male: Brass Female: Beryllium copper	Gold
Insulator	Teflon	N/A
Crimp ferrule	Annealed copper	Nickel or Gold

Electrical :

Electrical Data	Detail		
Impedance	50 ohm		
Frequency range	0~10 GHz		
Working voltage	RG178/U → 250 volts rms max. at sea level RG316/U, 405 → 335 volts rms max. at sea level		
Insulation resistance	1,000 megohms min.		
Dielectric withstanding voltage	RG178/U → 500 volts rms min. at sea level RG316/U, 405 → 750 volts rms min. at sea level		
Contact resistance	Center contact: 6 milliohm max. Outer contact: 1 milliohm max.		
VSWR : f (GHz)		Straight	Right angle
	RG178/U	1.25+0.04f	1.4+0.06f
	RG316/U, 405	1.20+0.04f	1.3+0.04f
Insertion loss	0.25dB max. (straight) 0.6 dB max. (right angle)		

Mechanical :

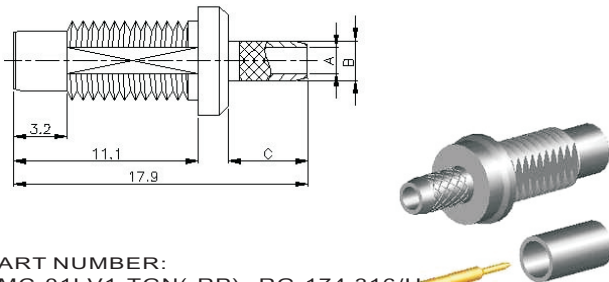
Mechanical Data	Detail
Coupling nut retention	35 lbs min.
Coupling nut torque	15 lbs-inch min.
Connector durability	500 cycles min.
Cable retention force	RG178/U → 10 lbs
	RG316/U → 20 lbs
	RG405 → 30 lbs

Environmental :

Environmental Data	Detail
Corrosion (Salt spray)	MIL-STD-202 METHOD 101 CONDITION B
Thermal shock	MIL-STD-202 METHOD 107 CONDITION B
Vibration	MIL-STD-202 METHOD 204 CONDITION D
Mechanical shock	MIL-STD-202 METHOD 213 CONDITION C

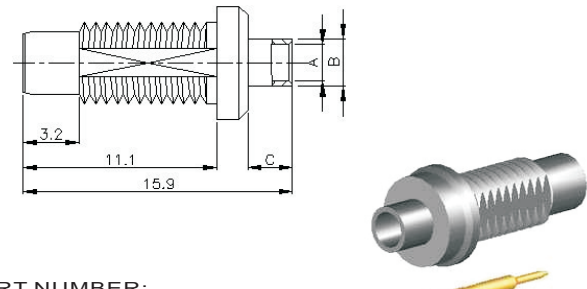
SMC STRAIGHT PLUG BULKHEAD FOR CABLE TYPE

CRIMP FOR FLEXIBLE CABLE



PART NUMBER:
SMC-01LV1-TGN(-RP) RG-174,316/U
SMC-01M-TGG(-RP) RG-178/U
SMC-01U-TGG(-RP) 1.30MM CABLE

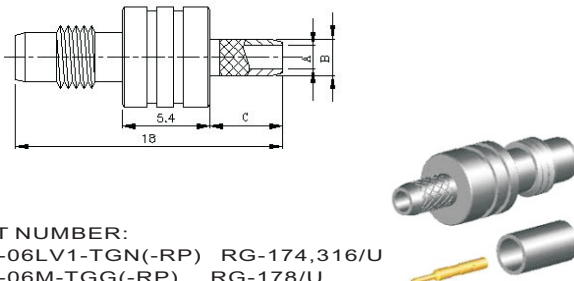
SOLDER FOR SEMI-RIGID CABLE



PART NUMBER:
SMC-01V1-TGG(-RP) RG-405/U(.085")
SMC-01V3-TGG(-RP) M17/151(.047")

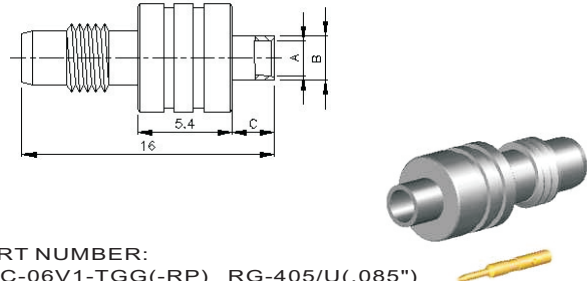
SMC STRAIGHT PLUG FOR CABLE TYPE

CRIMP FOR FLEXIBLE CABLE



PART NUMBER:
SMC-06LV1-TGN(-RP) RG-174,316/U
SMC-06M-TGG(-RP) RG-178/U
SMC-06U-TGG(-RP) 1.30MM CABLE

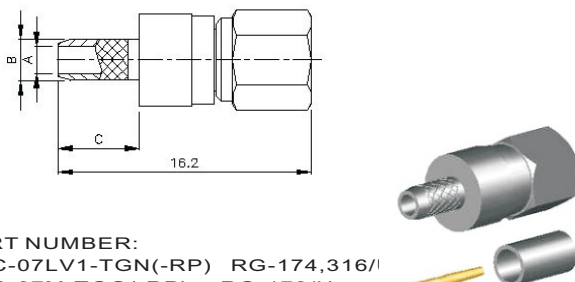
SOLDER FOR SEMI-RIGID CABLE



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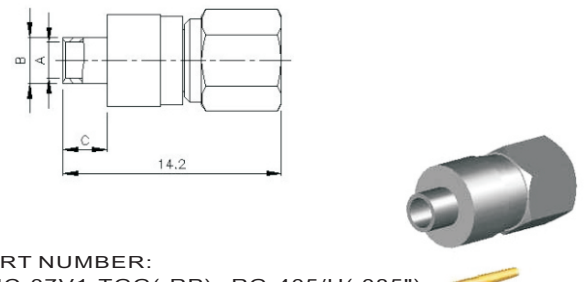
SMC STRAIGHT JACK FOR CABLE TYPE

CRIMP FOR FLEXIBLE CABLE



PART NUMBER:
SMC-07LV1-TGN(-RP) RG-174,316/U
SMC-07M-TGG(-RP) RG-178/U
SMC-07U-TGG(-RP) 1.30MM CABLE

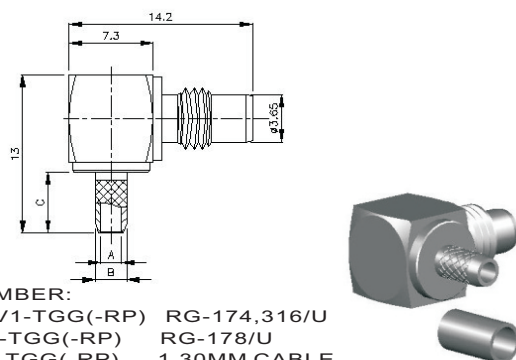
SOLDER FOR SEMI-RIGID CABLE



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SMC-07V3-TGG(-RP) M17/151(.047")

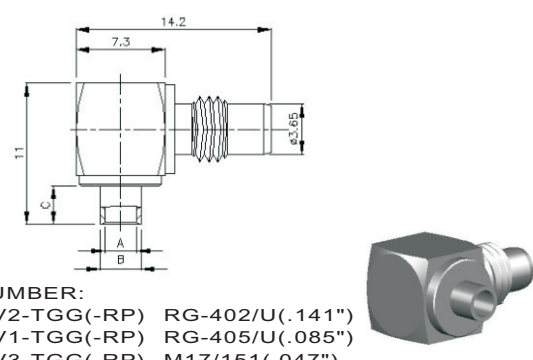
SMC RIGHT ANGLE PLUG FOR CABLE TYPE

CRIMP FOR FLEXIBLE CABLE



PART NUMBER:
SMC-08LV1-TGG(-RP) RG-174,316/U
SMC-08M-TGG(-RP) RG-178/U
SMC-08U-TGG(-RP) 1.30MM CABLE

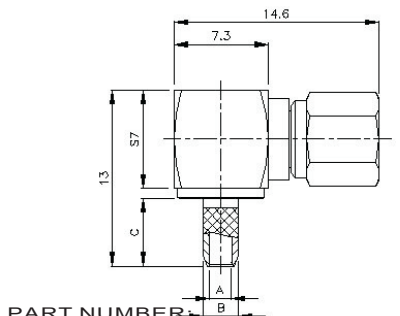
SOLDER FOR SEMI-RIGID CABLE



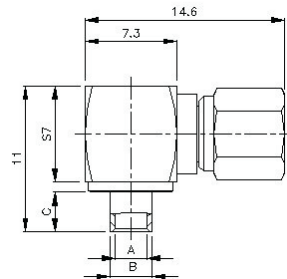
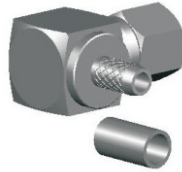
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SMC-08V2-TGG(-RP) RG-402/U(.141")
SMC-08V1-TGG(-RP) RG-405/U(.085")
SMC-08V3-TGG(-RP) M17/151(.047")



SMC RIGHT ANGLE JACK FOR CABLE TYPE



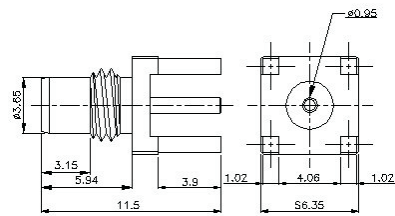
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SMC-03LV1-TGN RG-174,316/U
SMC-03M-TGG RG-178/U
SMC-03U-TGG 1.30MM CABLE



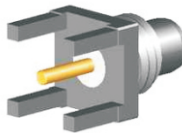
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SMC-03V3-TGG M17/151(.047")



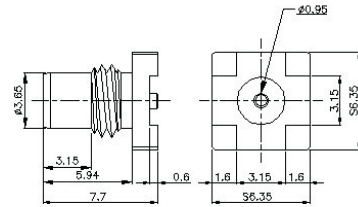
SMC STRAIGHT PLUG PCB MOUNT RECEPTACLE



PART NUMBER:
SMC-10-TGG



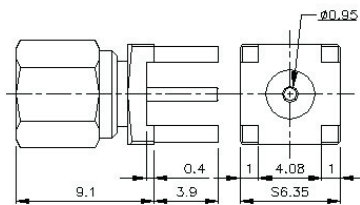
SURFACE MOUNT



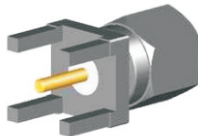
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SMC-10V4-TGG



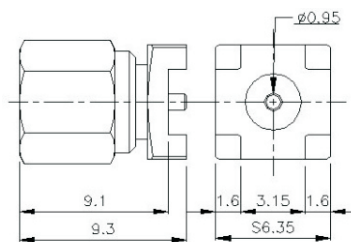
SMC STRAIGHT JACK PCB MOUNT RECEPTACLE



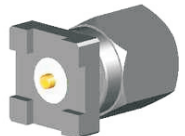
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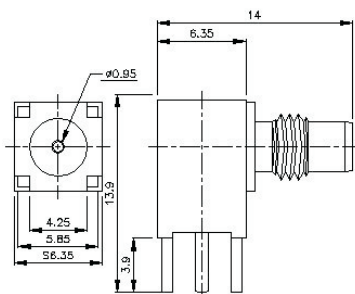
SURFACE MOUNT



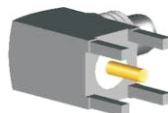
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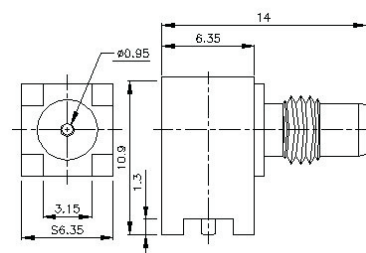
SMC RIGHT ANGLE PLUG PCB MOUNT RECEPTACLE



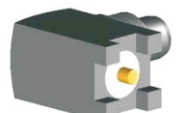
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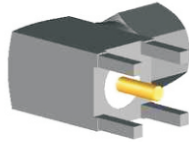
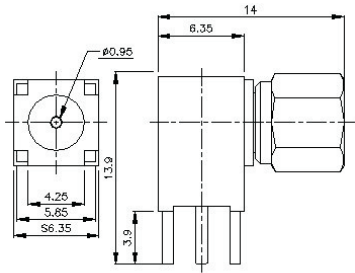
SURFACE MOUNT



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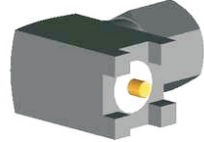
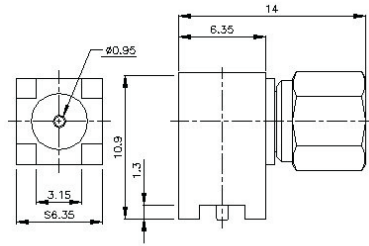


SMC RIGHT ANGLE JACK PCB MOUNT



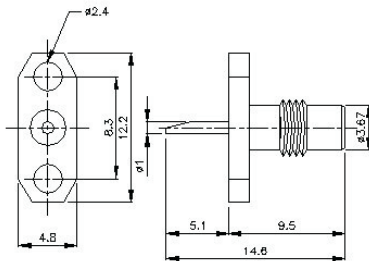
PART NUMBER:
SMC-09 -TGG

SURFACE MOUNT

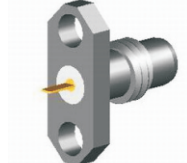
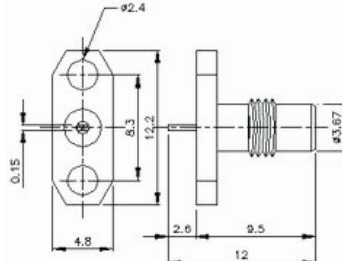


PART NUMBER:
SMC-09V4 -TGG

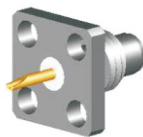
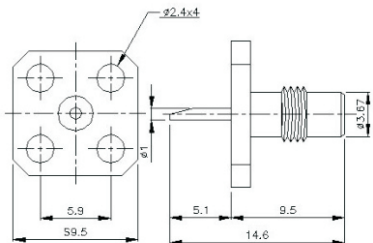
SMC STRAIGHT PLUG FLANGE MOUNT RECEPTACLE



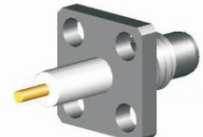
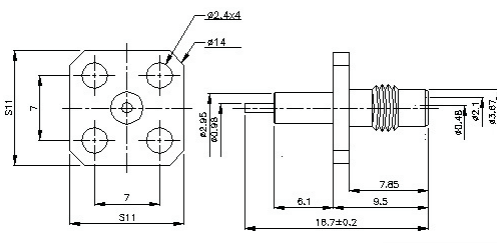
PART NUMBER:
SMC-12 -TGG



PART NUMBER:
SMC-12V4 -TGG

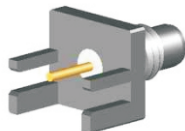
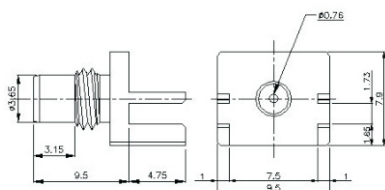


PART NUMBER:
SMC-13 -TGG



PART NUMBER:
SMC-13V4 -TGG

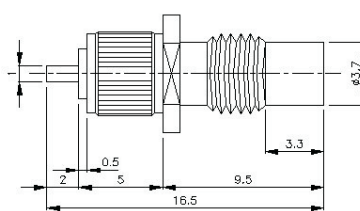
SMC STRAIGHT PLUG END LAUNCH



PART NUMBER	BOARD THICKNESS	A
SMC-10V5-TGN	1.57	1.73
SMC-10V6-TGN	1.07	1.22

SMC STRAIGHT PLUG RECEPTACLE

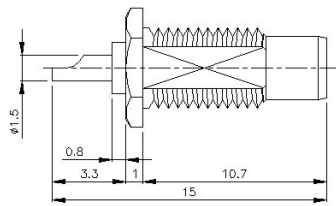
PRESS IN



PART NUMBER:
SMC-04 -TGG

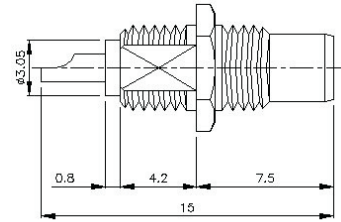
SMC STRAIGHT PLUG BULKHEAD RECEPTACLE

REAR MOUNT



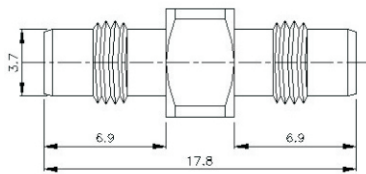
PART NUMBER:
SMC-17-TGG

REAR MOUNT



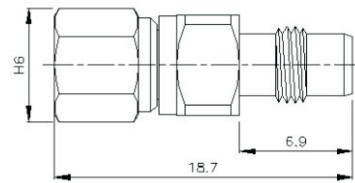
PART NUMBER:
SMC-17V4-TGG

SMC PLUG-PLUG ADAPTOR



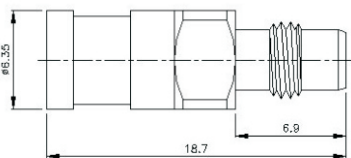
PART NUMBER:
SMC-18-TGG

SMC JACK-PLUG ADAPTOR



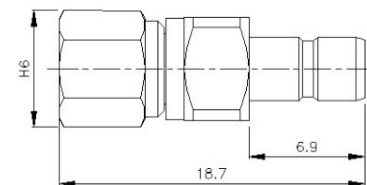
PART NUMBER:
SMC-19-TGG

SMC PLUG-SMB JACK ADAPTOR



PART NUMBER:
SMC-20-TGG

SMC JACK-SMB PLUG ADAPTOR



PART NUMBER:
SMC-23-TGG