

SMB/SMC Coaxial Connectors

A/D Electronics' subminiature coaxial connectors with 50 ohm impedance for application to 4 GHz (SMB) or 10 GHz (SMC).

The SMB types feature quick connect/disconnect snap-on mating, they operate to 4 GHz with low reflection.

The SMC types have #10-32UNF threaded coupling in screw-on designs and operate reliably to 10 GHz. Generally less expensive than the SMA, the SMB/SMC are used primarily in applications for microwave telephone and other non-defense telecommunication requirements.

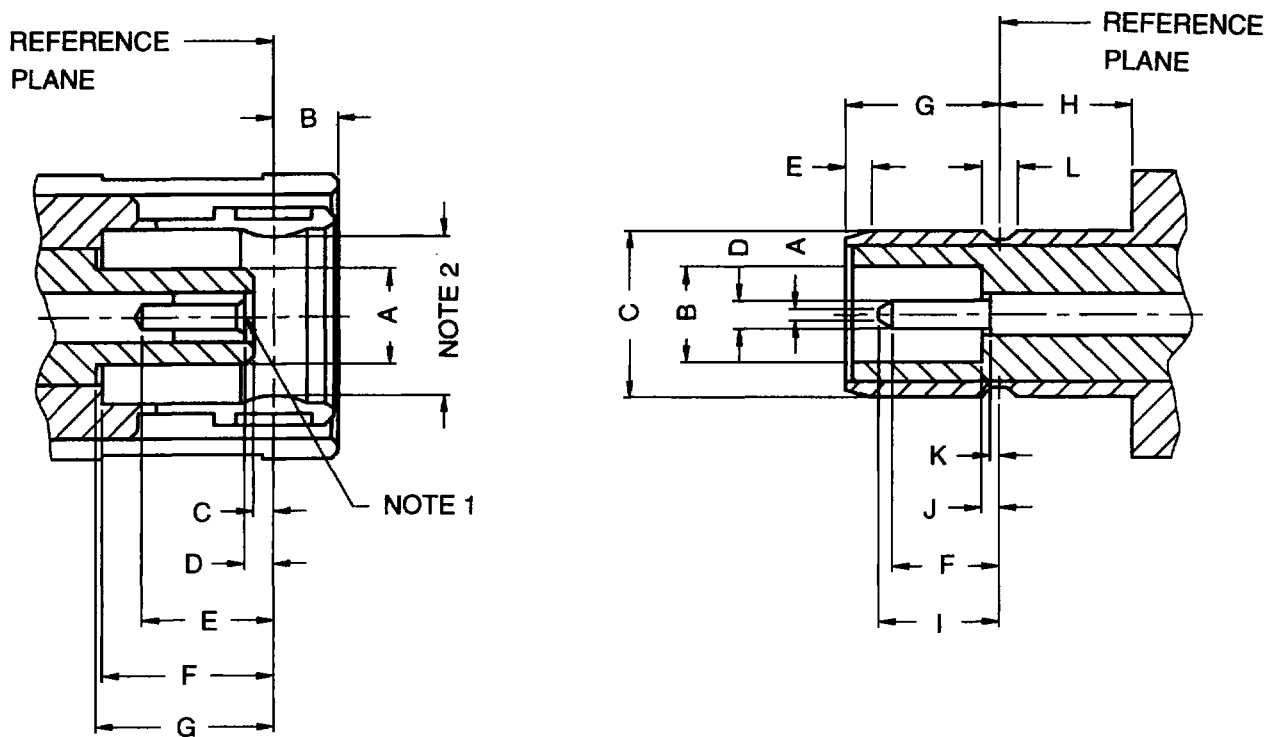
ELECTRICAL

Electrical Data		SMB		SMC	
Impedance		50 ohm		50 ohm	
Frequency range		0 - 4 GHz		0 - 10 GHz	
VSWR *f in GHz	Cable dielectric dimensions	0.87mm	1.5mm	0.87mm	1.5mm
	Straight connector DC - 1000 MHz	1.3+0.04f	1.25+0.04f	1.25+0.04f	1.15+0.04f
	Right angle connector DC - 1000 MHz	1.4+0.08f	1.3+0.04f	1.4+0.06f	1.25+0.04f
Dielectric withstanding Voltage 50 Hz rms		750V	1000V	750V	1000V
Working voltage 50 Hz rms		250V	335V	250V	335V
Working voltage DC		350V	450V	350V	450V
Insulation resistance		1000 Megohms min		1000 Megohms min	
Contact	Inner conductor	≤ 3 Megohms		≤ 3 Megohms	
Resistance	Outer conductor	≤ 5 Megohms		≤ 5 Megohms	
Insertion loss (dB max.)	Straight connectors	.30 dB max. at 1.5GHz		.25 dB max. at 4 GHz	
	Right angle connectors	.60 dB max. at 1.5GHz		.50 dB max. at 4 GHz	

MATERIAL

Parts Name		Material	Finish
Body, Metal parts		Brass per QQ-B-626	Nickel or gold per requirement
Contacts	Male	Brass per QQ-B-626	30u*Gold
	Female	Beryllium copper, Per QQ-C-530 heat, treated per MIL-H-7199	30u*Gold
Insulators		PTEF	None
Gasket		Silicone rubber	None
Crimp ferrules		Seamless copper tubing alloy	Nickel or gold per requirement

SMB Coaxial Connectors



PLUG

Letter	Millimeters	
	Minimum	Maximum
A	2.00	2.06
B	-	1.62
C	0.18	-
D	0.18	0.94
E	2.97	-
F	3.58	-
G	3.58	-

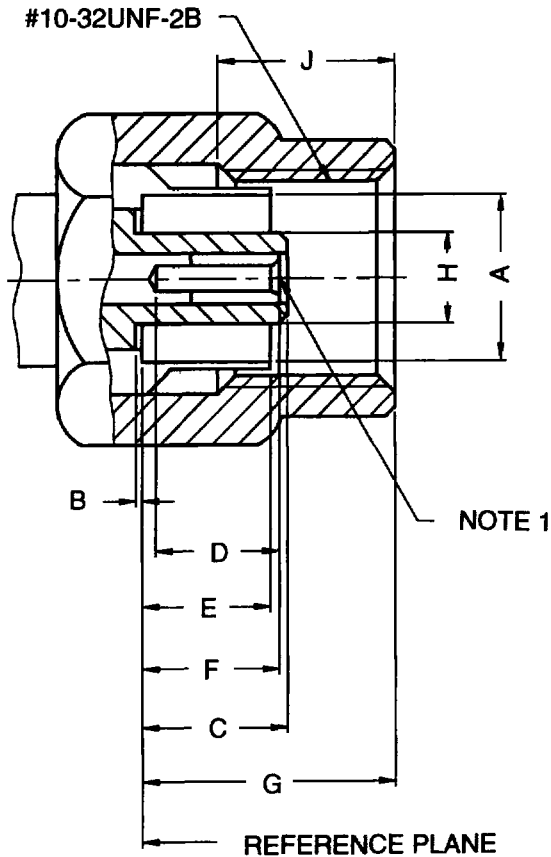
JACK

Letter	Millimeters	
	Minimum	Maximum
A	-	0.25
B	2.08	2.16
C	3.66	3.71
D	0.48	0.53
E	0.00	-
F	1.32	-
G	3.33	3.58
H	2.03	-
I	-	2.97
J	-	0.18
K	-	0.18
L	0.69	0.94

NOTE: 1. I.D. TO MEET VSWR AND CONTACT RESISTANCE WHEN MATED WITH .48/.53MM DIA. PIN.
2. MUST MEET THE FORCE TO ENGAGE AND DISENGAGE WHEN MATED WITH A MATING PART.

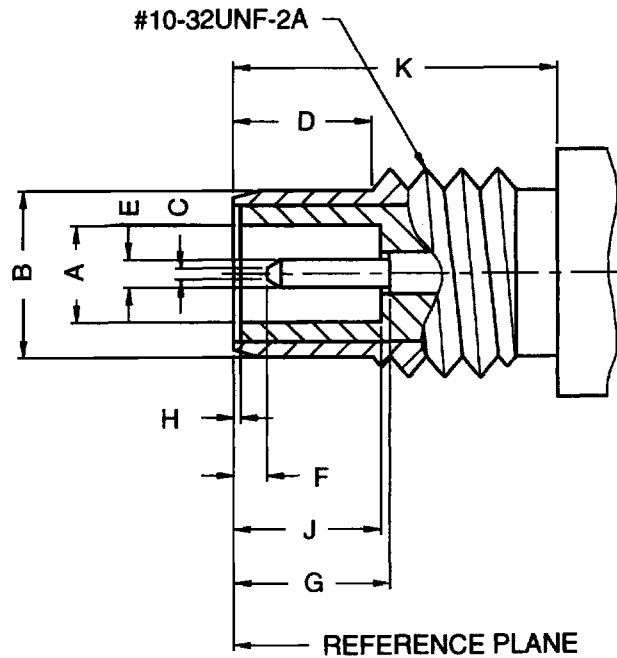
All dimensions are shown in millimeters

SMC Coaxial Connectors



PLUG

Letter	Millimeters	
	Minimum	Maximum
A	3.73	3.81
B	0.00	0.30
C	3.15	3.40
D	2.79	-
E	-	3.10
F	3.05	3.40
G	-	5.92
H	2.00	2.06
J	2.79	-



JACK

Letter	Millimeters	
	Minimum	Maximum
A	2.08	2.16
B	3.63	3.71
C	-	0.25
D	3.12	3.38
E	0.48	0.53
F	0.61	-
G	3.40	3.76
H	0.00	0.30
J	3.40	3.66
K	5.94	-

Note: 1. I.D. TO MEET VSWR AND CONTACT RESISTANCE
WHEN MATED WITH .48/.53MM DIA. PIN.

All dimensions are shown in millimeters

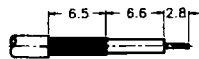
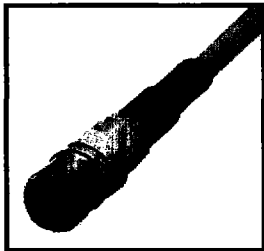
SMB/SMC Coaxial Connectors

Example-indicate parts number for order

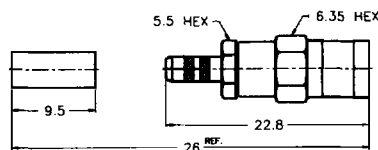
SMB6121G1 - B/N T 30G - 316/U - 50

MODEL NO.	METAL PARTS FINISH	INSULATOR	CENTER CONTACT FINISH	CABLE GROUP	IMPEDANCE
	B/N=Brass, Nickel B/3G=Brass, 3u" Au B/10G=Brass, 10u" Au B/15G=Brass, 15u" Au	T=Teflon	30G=30u" Au	316/U=RG316/U 174/U=RG174/U	50=50ohm

STRAIGHT CABLE PLUG

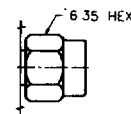


RECOMMENDED
CABLE STRIPPING DIM'S



(AFTER ASSEMBLY)

SMB

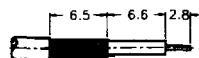
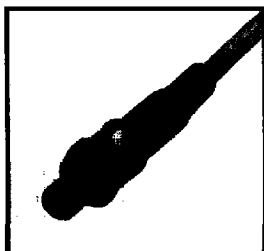


SMC

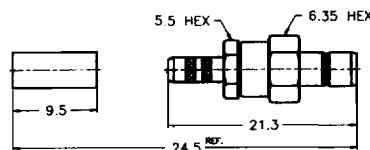
**MODEL NO: SMB6121G1
SMC6121G1**

CABLE: .174/U, 188/U, 316/U

STRAIGHT CABLE JACK



RECOMMENDED
CABLE STRIPPING DIM'S



(AFTER ASSEMBLY)

SMB

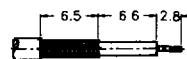
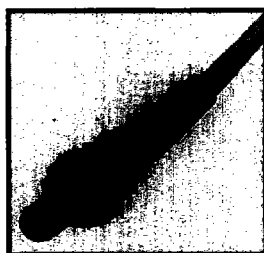


SMC

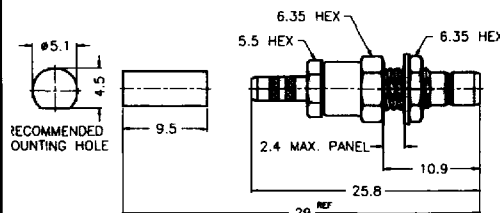
**MODEL NO: SMB1121G1
SMB1121G1**

CABLE: RG-174/U, 188/U, 316/U

BULKHEAD FEEDTHROUGH CABLE JACK



RECOMMENDED
CABLE STRIPPING DIM'S



(AFTER ASSEMBLY)

SMB



SMC

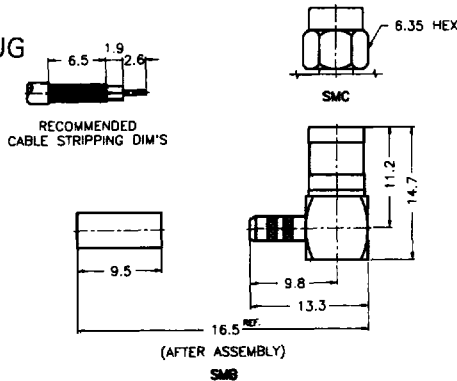
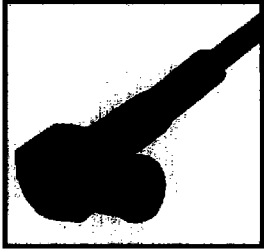
**MODEL NO: SMB1421G1
SMC1421G1**

CABLE: *RG-174/U, 188/U, 316/U

All dimensions are shown in millimeters

SMB/SMC Coaxial Connectors

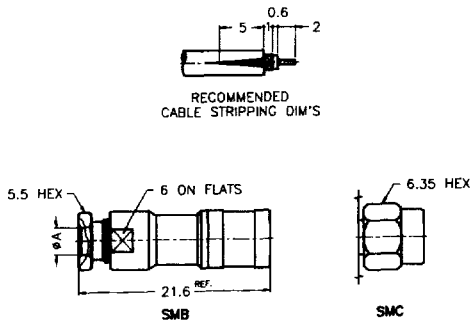
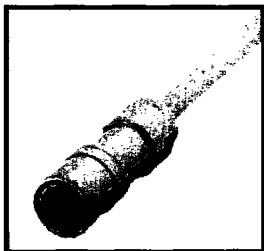
RIGHT ANGLE CABLE PLUG



**MODEL NO: SMB6112A1
SMC6112A1**

CABLE: RG-174/U, 188/U, 316/U

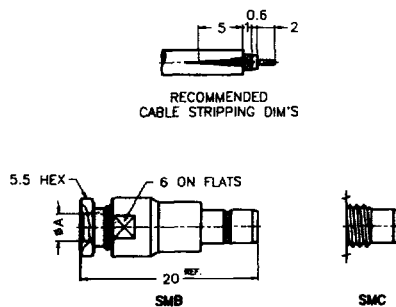
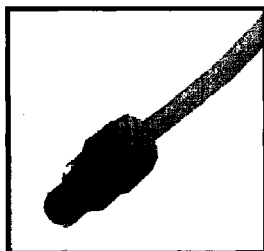
STRAIGHT CABLE PLUG



**MODEL NO: SMB6141E1
SMC6141E1**

CABLE: RG-174/U, 188/U, 316/U

STRAIGHT CABLE JACK



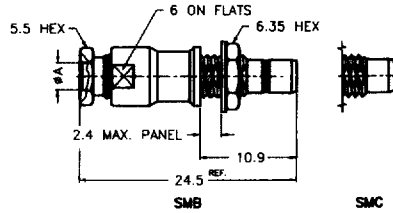
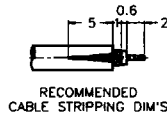
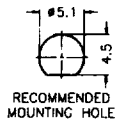
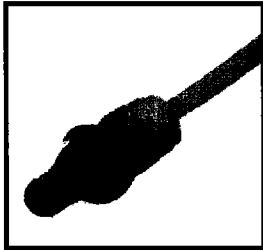
**MODEL NO: SMB1141E1
SMC1141E1**

CABLE: RG-174/U, 188/U, 316/U

All dimensions are shown in millimeters

SMB/SMC Coaxial Connectors

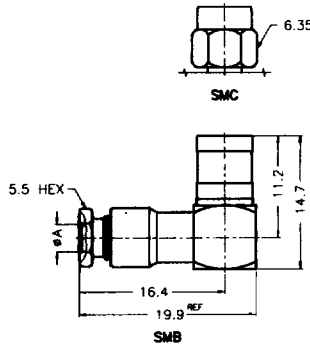
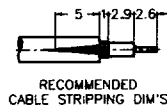
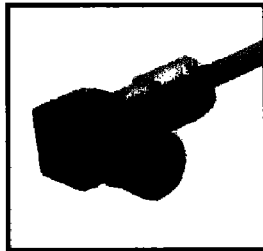
BULKHEAD FEEDTHROUGH CABLE JACK



**MODEL NO: SMB1441E1
SMC1441E1**

CABLE: RG-174/U, 188/U, 316/U

RIGHT ANGLE CABLE PLUG



**MODEL NO: SMB6142E1
SMC6142E1**

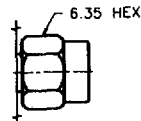
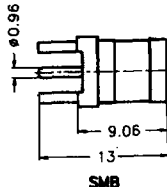
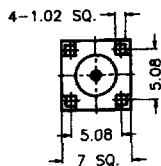
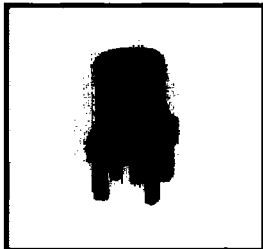
CABLE: RG-174/U, 188/U, 316/U

All dimensions are shown in millimeters

SMB/SMC Coaxial Connectors

STRAIGHT PLUG FOR
P.C. BOARD

MODEL NO: SMB6251B1
SMC6251B1

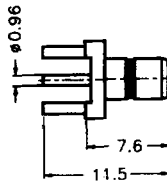
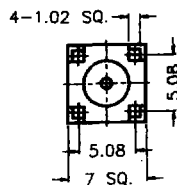
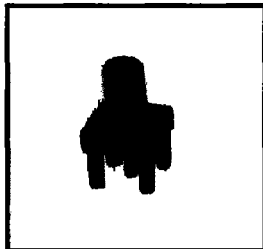


SMB

SMC

STRAIGHT JACK FOR
P.C. BOARD

MODEL NO: SMB1251B1
SMC1251B1

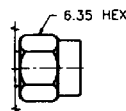
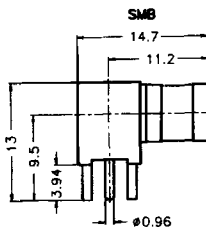
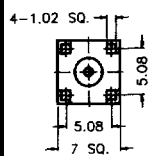
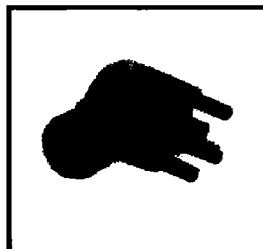


SMB

SMC

RIGHT ANGLE PLUG FOR
P.C. BOARD

MODEL NO: SMB6252B1
SMC6252B1

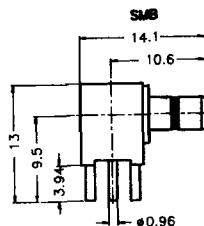
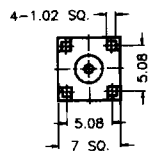


SMB

SMC

RIGHT ANGLE JACK FOR
P.C. BOARD

MODEL NO: SMB1252B1
SMC1252B1



SMB

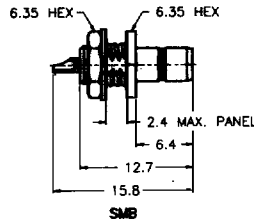
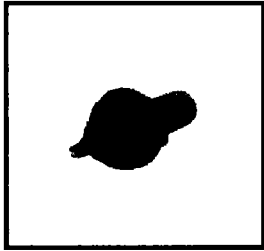
SMC

All dimensions are shown in millimeters

SMB/SMC Coaxial Connectors

**BULKHEAD JACK RECEPTACLE
-FRONT MOUNT**

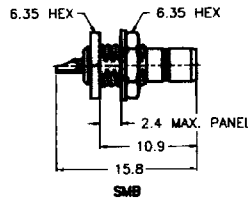
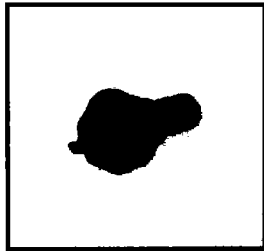
**MODEL NO: SMB1351B1
SMC1351B1**



SMC

**BULKHEAD JACK RECEPTACLE
-REAR MOUNT**

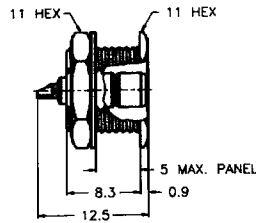
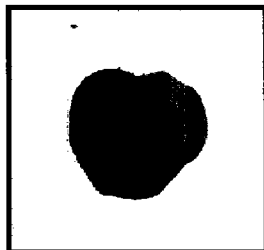
**MODEL NO: SMB1451B1
SMC1451B1**



SMC

**BLUKHEAD RECESSED JACK
RECEPTACLE**

MODEL NO: SMB1351B9



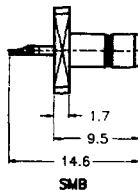
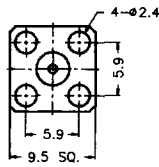
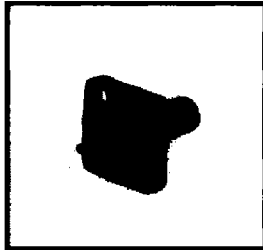
All dimensions are shown in millimeters



SMB/SMC Coaxial Connectors

PANEL MOUNT JACK RECEPTACLE
-4 HOLE SQ. FLANGE

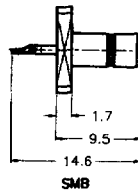
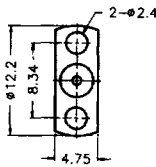
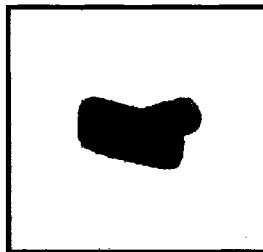
MODEL NO: SMB1551A1
SMC1551A1



SMC

PANEL MOUNT JACK RECEPTACLE
-2 HOLE FLANGE

MODEL NO: SMB1551B1
SMC1551B1



SMC

All dimensions are shown in millimeters