

# SMA Series

## Specification

### MATERIALS :

Connector part	Material	Plating
Bodies, coupling nut	Brass	Gold or Nickel
Center contact	Male: Brass Female: Beryllium-copper	Gold
Insulator	Teflon	
Crimp ferrule	Annealed copper	Gold or Nickel
Gasket	Silicone rubber	

### ELECTRICAL :

Electrical Data	Detail
Impedance	50 ohms
Frequency range	0 to 4 GHz
Working voltage	RG178,196= 250 Vrms at sea level max. RG174,188,316= 335 Vrms at sea level max.
Insulation resistance	1000 Megohms min.
Dielectric withstanding voltage	RG178,196= 750 Vrms rms min. RG174,188,316= 335 Vrms at sea level max.
Contact resistance	Center contact: 6.0 milliohms max. Outer contact: 1.0 milliohms max.
VSWR	Straight connector RG178,196= $1.30+0.04F$ (F in GHz) RG174,188,316= $1.25+0.04F$ (F in GHz) R/A connector: RG178,196= $1.45+0.06F$ (F in GHz) RG174,188,316= $1.35+0.04F$ (F in GHz)
Insertion loss	Straight cable connector = 0.30 dB max. at 1.5 GHz Right angle cable connector = 0.60 dB max. at 1.5 GHz

### MECHANICAL :

Electrical Data	Detail
Engagement force	14.0 pounds max.
Disengagement force	2.0 lbs ~ 14.0 lbs
Connector durability	500 matings
Cable retention force	RG178= 7.3 lbs min. RG16= 12.1 lbs min. RG5= 28.7 lbs min.

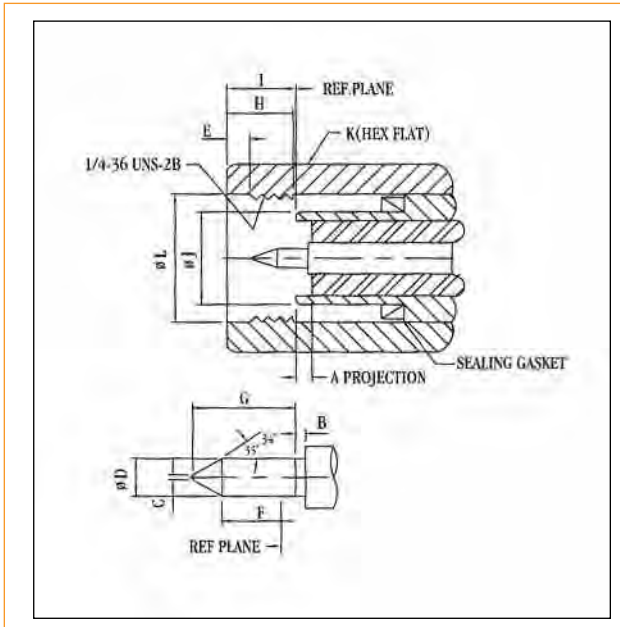
### ENVIRONMENTAL :

Electrical Data	Detail
Corrosion (Salt spray)	MIL-STD-202F, Method 101D, Condition B
Thermal shock	MIL-STD-202F, Method 1017G, Condition A
Vibration	MIL-STD-202F, Method 204D, Condition B
Mechanical shock	MIL-STD-202F, Method 213B, Condition A

# SMA Series

## Interface Dimensions

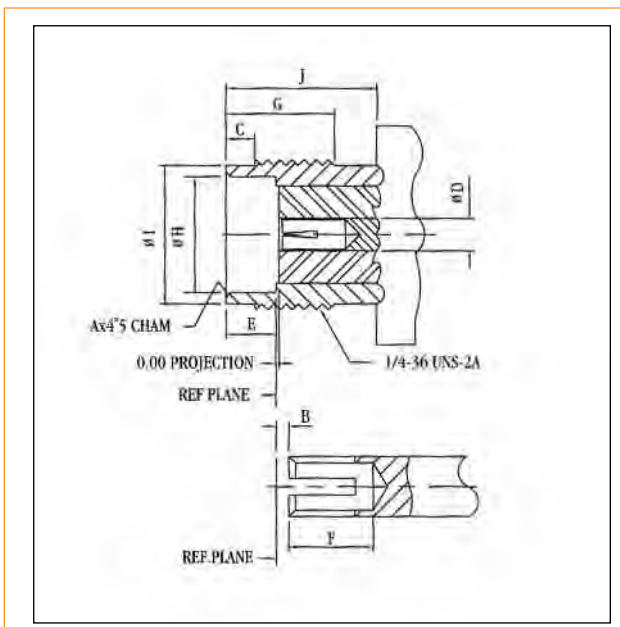
### PLUG



INTERFACE DIMENSIONS IN MM/INCHES		
ITEM	MIN.	MAX.
A	—	0.00(.000)
B	0.00(.000)	0.25(.010)
C	—	0.30(.012)
D	0.90(.3557)	0.94(.037)
E	0.38(.015)	1.14(.045)
F	1.27(.050)	—
G	—	2.54(.100)
H	3.30(.130)	—
I	—	3.43(.135)
J	—	4.59(.181)
K	7.85(.309)	8.00(.126)
L	6.35(.250)	—

SMA Series

### JACK



INTERFACE DIMENSIONS IN MM/INCHES		
ITEM	MIN.	MAX.
A	—	0,13(.005)
B	0.00(.000)	0.25(.010)
C	0.38(.015)	1.14(.045)
D	1.24(.049)	1.29(.051)
E	1.88(.074)	1.98(.078)
F	2.67(.105)	—
G	4.32(.170)	—
H	4.60(.181)	—
I	5.28(.208)	5.49(.216)
J	5.54(.218)	—

# SMA Series

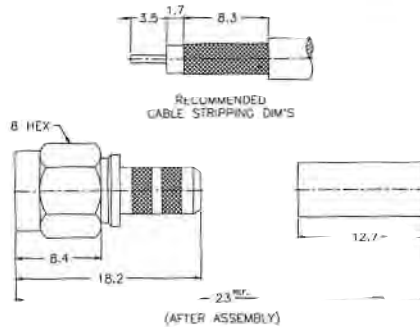
Crimp Termination for Flexible Cable

SMA Series

## STRAIGHT PLUG - CAPTIVE CONTACT

**P/N** BO5101

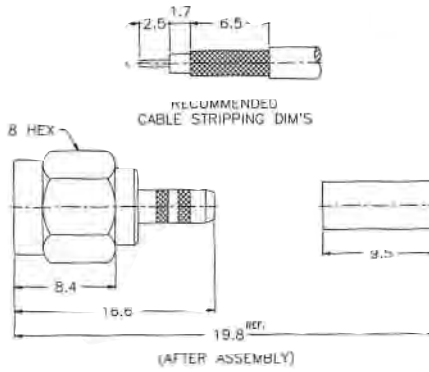
**CABLE** RG-58/U, 142/U, 223/U



## STRAIGHT PLUG - CAPTIVE CONTACT

**P/N** BO5102

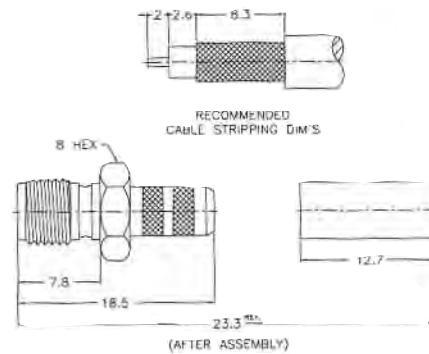
**CABLE** RG-174/U, 188/U, 316/U



## STRAIGHT JACK

**P/N** BO5111

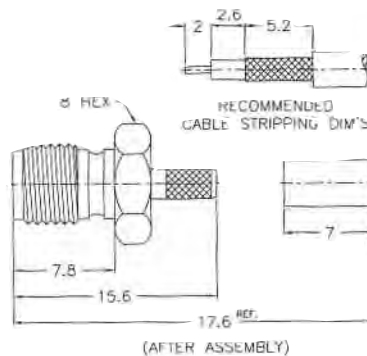
**CABLE** RG-58/U, 142/U, 223/U



## STRAIGHT JACK

**P/N** BO5112

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



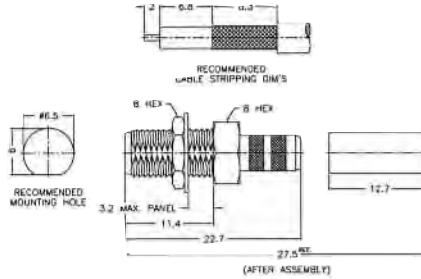
# SMA Series

## Crimp Termination for Flexible Cable

### STRAIGHT BULKHEAD JACK

**P/N** BO5113

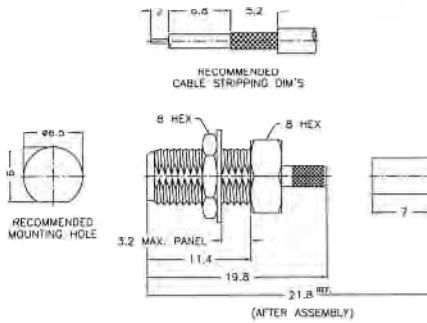
**CABLE** RG-58/U, 142/U, 223/U



### STRAIGHT BULKHEAD JACK

**P/N** BO5114

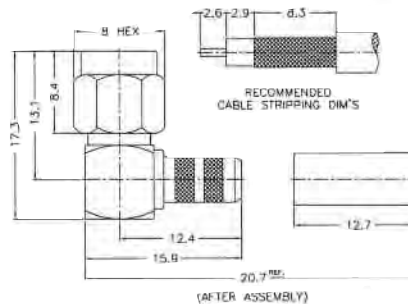
**CABLE** RG-174/U, 188/U, 316/U



### RIGHT ANGLE PLUG

**P/N** BO5301

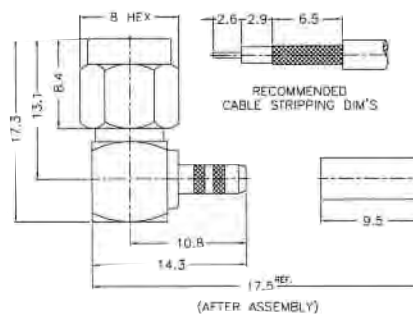
**CABLE** RG-58/U, 142/U, 223/U



### RIGHT ANGLE PLUG

**P/N** BO5302

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



SMA Series

# SMA Series

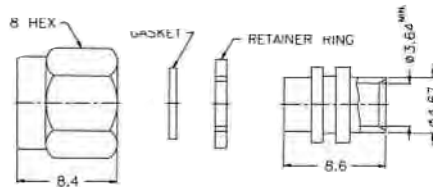
Direct Solder for Semi-Rigid .085" or .141" Cable

SMA Series

## STRAIGHT CABLE PLUG - HIGH VOLTAGE

P/N BO5103

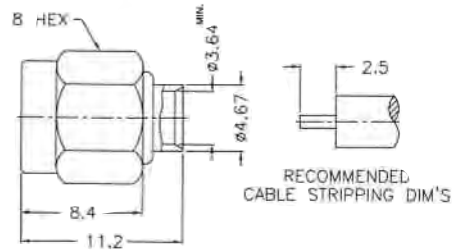
CABLE .141"



## STRAIGHT CABLE PLUG - WITH CONTACT

P/N BO5104

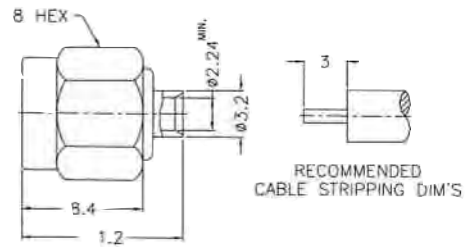
CABLE .141"



## STRAIGHT CABLE PLUG

P/N BO5105

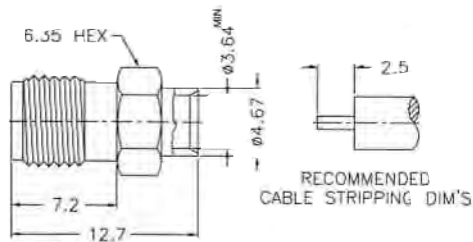
CABLE .085"



## STRAIGHT CABLE JACK

P/N BO5115

CABLE .141"



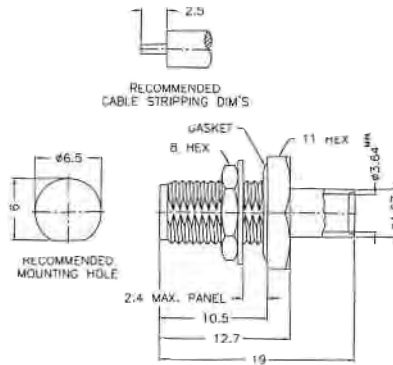
# SMA Series

Direct Solder for Semi-Rigid .085" or .141" Cable

## BULKHEAD FEEDTHROUGH CABLE JACK

P/N BO5410

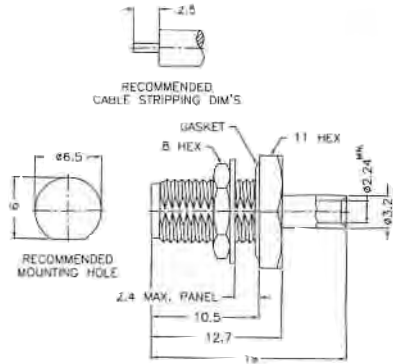
CABLE .141"



## BULKHEAD CABLE JACK

P/N BO5411

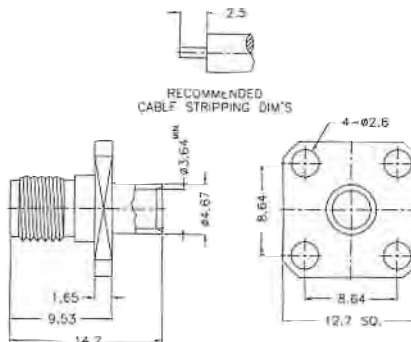
CABLE .085"



## PANEL MOUNT CABLE JACK - 4 HOLES SQ FLANGE

P/N BO5215

CABLE .141"



SMA Series

# SMA Series

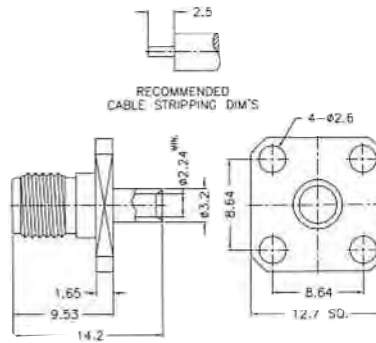
Direct Solder for Semi-Rigid .085" or .141" Cable

SMA Series

## PANEL MOUNT JACK - 4 HOLES SQ FLANGE

P/N BO5216

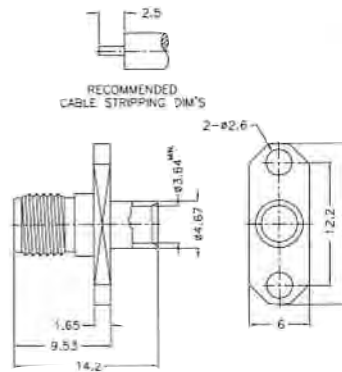
CABLE .085"



## PANEL MOUNT CABLE JACK - 2 HOLES FLANGE

P/N BO5217

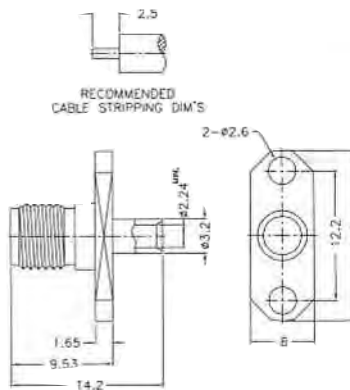
CABLE .141"



## PANEL MOUNT JACK - 2 HOLES SQ FLANGE

P/N BO5218

CABLE .085"

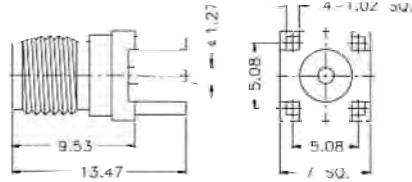


# SMA Series

Printed Circuit Board, Straight Terminal

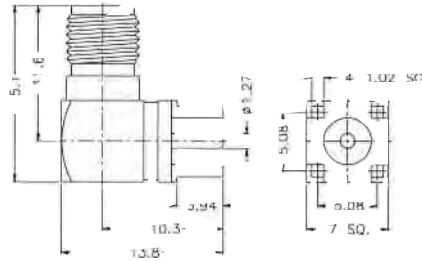
## STRAIGHT JACK FOR P.C. BOARD

P/N BO5610



## RIGHT ANGLE JACK FOR P.C. BOARD

P/N BO5611



SMA Series

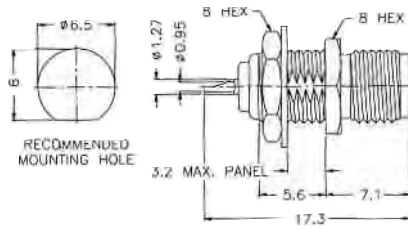


# SMA Series

Bulkhead Receptacle, Solder Pot Terminal

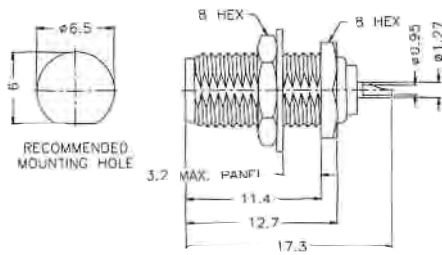
## BULKHEAD JACK RECEPTACLE - FRONT MOUNT

P/N BO5412



## BULKHEAD JACK RECEPTACLE - REAR MOUNT

P/N BO5414

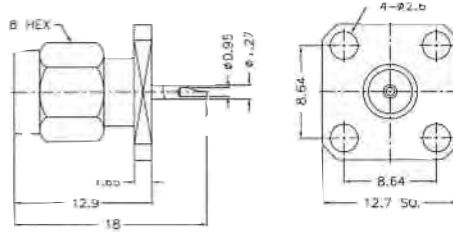


# SMA Series

## Panel Mount. Solder Pot Terminal

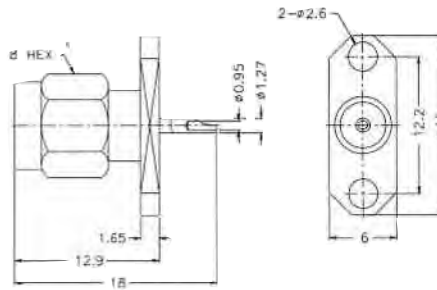
### PANEL MOUNT PLUG RECEPTACLE - 4 HOLES SQ FLANGE

P/N BO5221



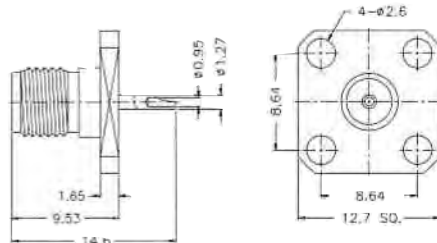
### PANEL MOUNT PLUG RECEPTACLE - 2 HOLES FLANGE

P/N BO5222



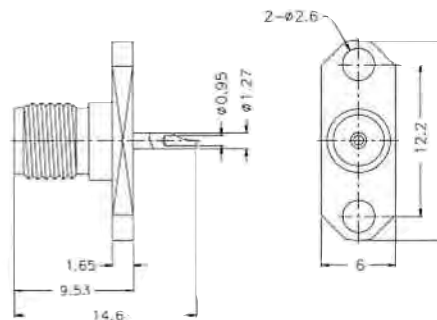
### PANEL MOUNT JACK RECEPTACLE - 4 HOLES SQ FLANGE

P/N BO5230



### PANEL MOUNT JACK RECEPTACLE - 2 HOLES FLANGE

P/N BO5231

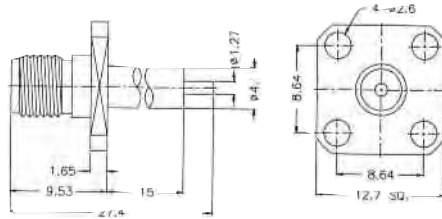


# SMA Series

Panel Mount. Solder Pot Terminal

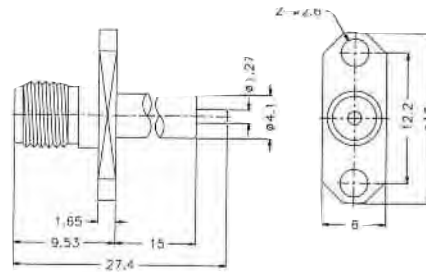
**PANEL MOUNT JACK RECEPTACLE  
- 4 HOLES SQ FLANGE - EXPOSED TFE TYPE**

**P/N** BO5232



**PANEL MOUNT JACK RECEPTACLE  
- 2 HOLES FLANGE - EXPOSED TFE TYPE**

**P/N** BO5233



# SMA Series

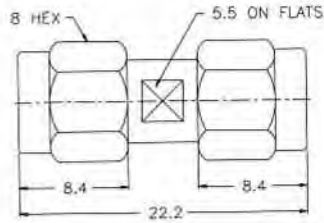
## Miniature In-Series Adapter

### PLUG TO PLUG ADAPTER

P/N BO5500

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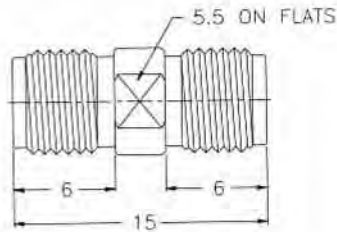


### JACK TO JACK ADAPTER

P/N BO5511

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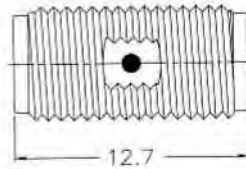


### JACK TO JACK ADAPTER

P/N BO5512

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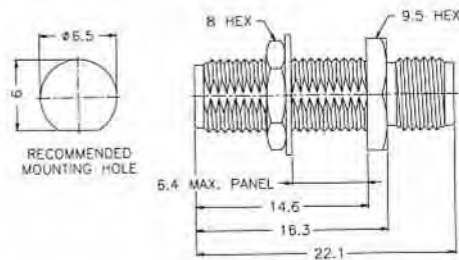


### JACK TO JACK ADAPTER - BULKHEAD FEEDTHROUGH

P/N BO5513

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# SMA Series

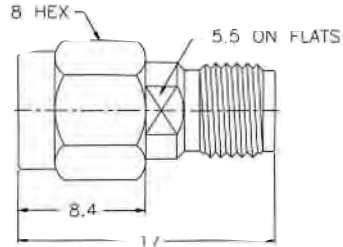
## Miniature In-Series Adapter

### PLUG TO JACK ADAPTER

P/N BO5501

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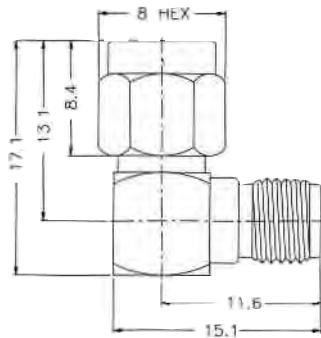


### PLUG TO JACK ADAPTER - RIGHT ANGLE

P/N BO5502

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*Other types available on request*

# SMB / Series

## Specification

### MATERIALS :

Connector part	Material	Plating
Bodies	Brass	Gold or Nickel
Center contact	Male: Brass Female: Beryllium-copper	Gold
Insulator	Teflon	
Crimp ferrule	Annealed copper	Gold or Nickel

### ELECTRICAL :

Electrical Data	Detail
Impedance	50 ohms
Frequency range	0 to 4 GHz
Working voltage	RG178,196= 250 Vrms at sea level max. RG174,188,316= 335 Vrms at sea level max.
Insulation resistance	1000 Megohms min.
Dielectric withstanding voltage	RG178,196= 750 Vrms rms min. RG174,188,316= 335 Vrms at sea level min.
Contact resistance	Center contact: 6.0 milliohms max. Outer contact: 1.0 milliohms max.
VSWR	Straight connector RG178,196= $1.30+0.04F$ (F in GHz) RG174,188,316= $1.25+0.04F$ (F in GHz) R/A connector: RG178,196= $1.45+0.06F$ (F in GHz) RG174,188,316= $1.35+0.04F$ (F in GHz)
Insertion loss	Straight cable connector = 0.30 dB max. at 1.5 GHz Right angle cable connector = 0.60 dB max. at 1.5 GHz

### MECHANICAL :

Electrical Data	Detail
Engagement force	14.0 pounds max.
Disengagement force	2.0 lbs ~ 14.0 lbs
Connector durability	500 matings
Cable retention force	RG178= 7.3 lbs min. RG16= 12.1 lbs min. RG5= 28.7 lbs min.

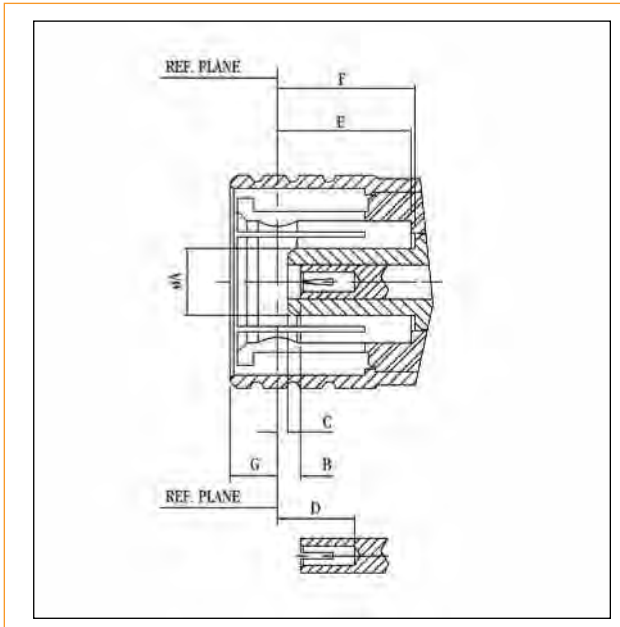
### ENVIRONMENTAL :

Electrical Data	Detail
Corrosion (Salt spray)	MIL-STD-202F, Method 101D, Condition B
Thermal shock	MIL-STD-202F, Method 1017G, Condition A
Vibration	MIL-STD-202F, Method 204D, Condition B
Mechanical shock	MIL-STD-202F, Method 213B, Condition A

# SMB / Series

## Interface Dimensions

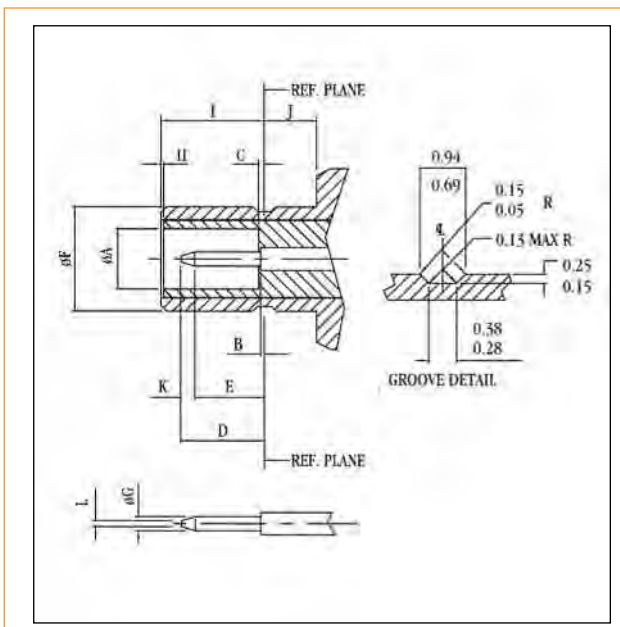
### PLUG



INTERFACE DIMENSIONS IN MM/INCHES		
ITEM	MIN.	MAX.
A	—	2.06(.081)
B	0.18(.007)	0.94(.037)
C	0.18(.007)	—
D	2.97(.117)	—
E	3.58(.141)	—
F	3.58(.141)	—
G	—	1.63(.064)

SMB Series

### JACK



INTERFACE DIMENSIONS IN MM/INCHES		
ITEM	MIN.	MAX.
A	2.084(.08)	—
B	—	0.18(.007)
C	—	0.18(.007)
D	—	2.97(.117)
E	1.32(.052)	—
F	—	3.71(.146)
G	0.48(.019)	0.53(.021)
H	0.00(.000)	—
I	3.33(.131)	3.58(.141)
J	1.65(0.65)	—
K	0.25(.010)	—
L	—	0.25(.010)

# SMB / Series

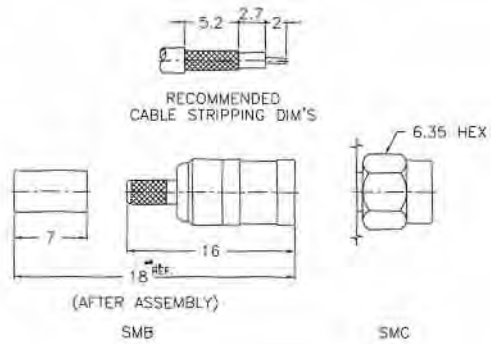
Crimp Attachment for Flexible Cable

SMB Series

## STRAIGHT PLUG

P/N BO4100

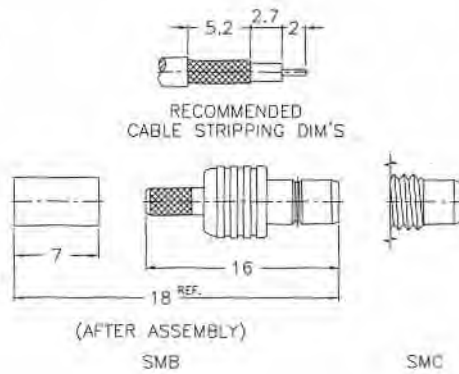
CABLE RG-174/U, 188/U, 316/U, 196/U



## STRAIGHT JACK

P/N BO4110

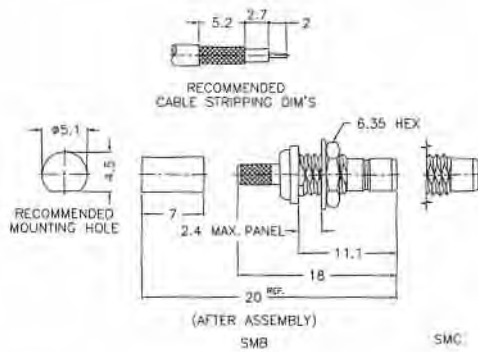
CABLE RG-174/U, 188/U, 316/U, 196/U



## BULKHEAD FEEDTHROUGH JACK

P/N BO4410

CABLE RG-174/U, 188/U, 316/U, 196/U





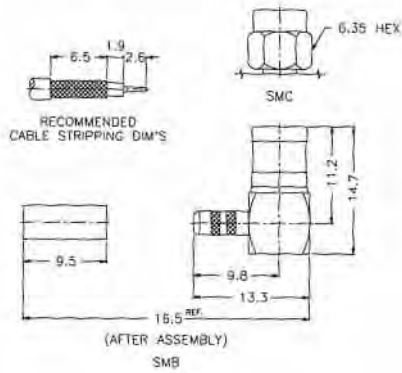
# SMB / Series

Crimp Termination for Flexible Cable

## RIGHT ANGLE PLUG

P/N BO4300

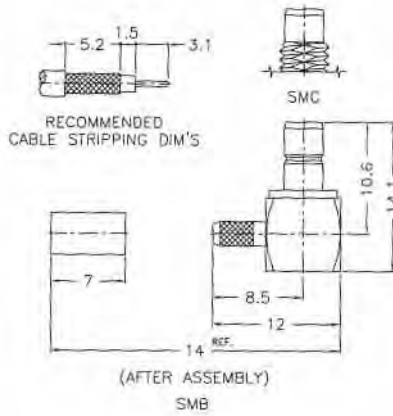
CABLE RG-174/U, 188/U, 316/U



## RIGHT ANGLE JACK

P/N BO4310

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



SMB Series

# SMB / Series

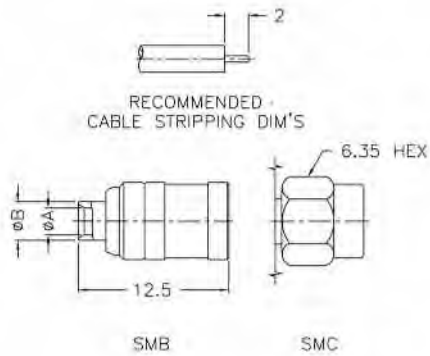
Direct Solder for Semi-Rigid Cable

SMB Series

## STRAIGHT CABLE PLUG

P/N BO4101

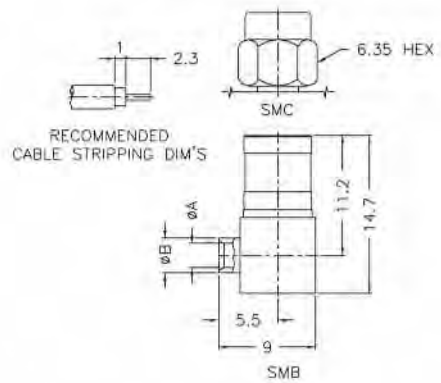
CABLE .085 A=2,2 min., B=3,0 min.



## RIGHT ANGLE CABLE PLUG

P/N BO4302

CABLE .085 A=2,2 min., B=3,0 min.

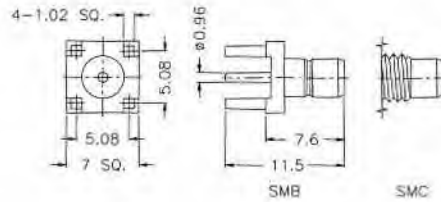


# SMB / Series

Printed Circuit Board, Straight Terminal

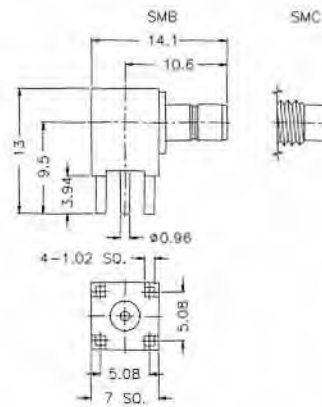
## STRAIGHT JACK FOR P.C.BOARD

P/N BO4610



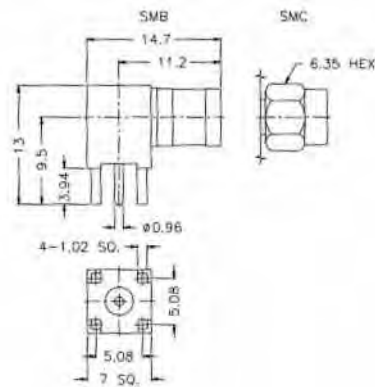
## RIGHT ANGLE JACK FOR P.C.BOARD

P/N BO4613



## RIGHT ANGLE PLUG FOR P.C.BOARD

P/N BO4603



SMB Series

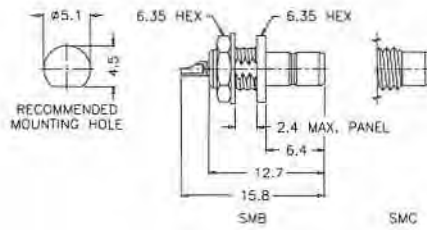
# SMB / Series

Bulkhead Mount. Solder Pot Terminal

SMB Series

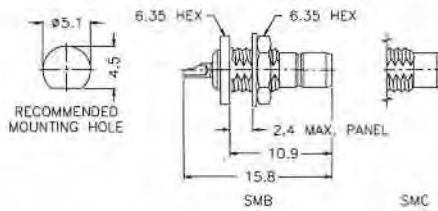
## BULKHEAD JACK RECEPTACLE - FRONT MOUNT

P/N BO4412



## BULKHEAD JACK RECEPTACLE - REAR MOUNT

P/N BO4411



Other types available on request

# 1 part numbering system

