

# BMA Series

BMA



## Description

BMA are 50-ohm, high-frequency connectors with slide-on mating, approximately the same size as SMA connectors.

## Applications

- Satellite Communication Equipment
- Microwave Subsystems
- Test and Measurement
- Wireless Base Station Equipment
- Military Radar

## Features

- Blindmate & "floating" configurations
- Good electrical performance up to 22GHz
- Misalignment in board to flange application.

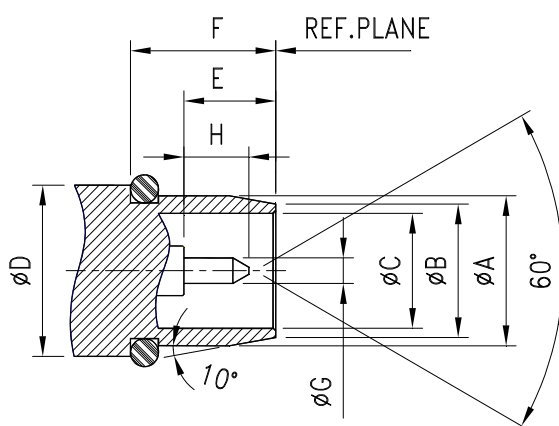
# BMA Series

## BMA - Specification

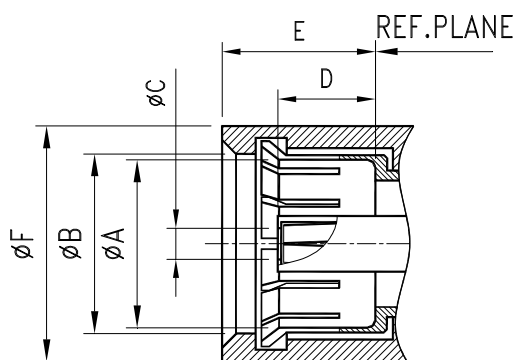
BMA connectors are 50-ohm with slide-on mating & non-locking interface that accomplish feature of blindmate. The feature of blindmate has an external spring to provide mechanical movement for extensive mechanical misalignment of  $\pm .020$  radial and .060 axial minimum is suitable for high performance microwave applications such as wireless infrastructure, satellite equipment and test and measurement.

BMA also offer good electrical performance up to 22GHz and approximately the same size as SMA connectors

## Interface Mating Dimensions:



PLUG



JACK

Letter	Millimeters	
	Minimum	Maximum
A	5.31(.209)	5.36(.211)
B	—	4.90(.193)
C	4.09 NOM.(1.61 NOM)	
D	—	7.62(.300)
E	3.25(.128)	—
F	5.03(.198)	—
G	0.90(.0355)	0.94(.0370)
H	2.29 NOM.(.090 NOM)	

Letter	Millimeters	
	Minimum	Maximum
A	—	5.08(.200)
B	5.72(.225)	—
C	SEE NOTE 1	
D	—	3.23(.127)
E	—	5.03(.198)
F	7.37(.290)	—

Note 1. Mated with  $0.92 \pm 0.02$  Pin.

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## Electrical :

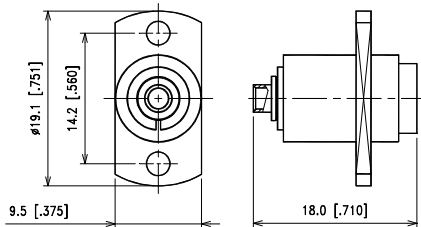
Impedance	50ohm
Frequency Range	0 to 22.0 GHz
VSWR	RG-402(.141"OD)→1.02+.005f GHz(DC~18GHz) 1.02+.008f GHz(18~22GHz) RG-405(.085"OD)→1.05+.005f GHz(DC~18GHz) 1.05+.009f GHz(18~22GHz)
Voltage Rating	RG-402(.141"OD)→375 volts min. RG-405(.085"OD)→335 volts rms min.
Dielectric withstanding Voltage	RG-402(.141"OD)→1500 volts rms at sea level RG-405(.085"OD)→1000 volts rms at sea level
Contact resistance	Center Contact : 3.0 Milliohms Max. Outer Contact : 2.0 Milliohms Max.
Insulator resistance	5,000 Megaohms min.

## Mechanical & Environmental :

Durability	The connector to be tested and it's mating connector shall be subjected to 500 insertions and withdrawal cycles at 12 cycles per minute maximum. The connector shall show no evidence of mechanical failure and connector shall meet the mating characteristic requirements.
Engagement force	3.0 lbs max.
Disengagement force	1.5 lbs max.
Center Contact Retention	6.0 lbs. Minimum
Vibration	MIL-STD-202, Method 204, Condition D
Salt Spray	MIL-STD-202, Method 101, Condition B
Shock	MIL-STD-202, Method 213, Condition I
Temperature Range	-65°C to +125°C
Thermal Shock	MIL-STD-202, Method 107, Condition B
Moisture Resistance	MIL-STD-202, Method 106

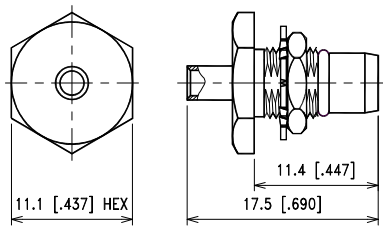
## Material :

	Material	Plating
Bodies	Brass	Gold
	Stainless steel	Passivated
Center Contact	Male:Brass	Gold
	Female:Beryllium-Copper	Gold
Insulation	Teflon	None
Gasket	Silicone	None
Spring Basket	Beryllium-Copper	Gold
Spring	Stainless steel	None



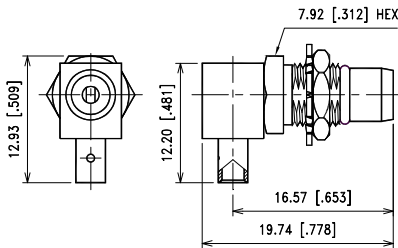
PANEL MOUNT CABLE JACK -2 HOLE  
SQUARE FLNAGE

P/N	Cable Group	Impedance
160-F130	25	50
160-F13A	24	50



BULKHEAD CABLE PLUG

P/N	Cable Group	Impedance
160-M110	25	50
160-M111	27	50

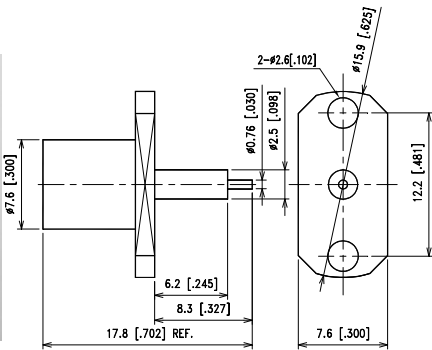


RIGHT ANGLE BULKHEAD CABLE PLUG

P/N	Cable Group	Impedance
160-M120	25	50
160-M121	27	50

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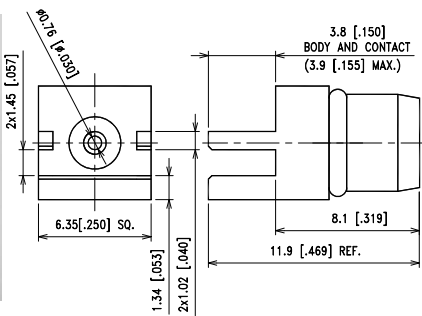
PANEL MOUNT. SOLDER POT TERMINALS



PANEL MOUNT CABLE JACK -2 HOLE  
SQUARE FLNAGE

P/N	Cable Group	Impedance
160-F320	N/A	50

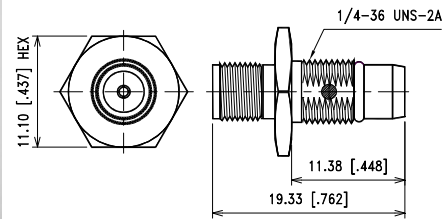
PRINTED CIRCUIT BOARD



STRAIGHT PLUG FOR PRINTED  
CIRCUIT BOARD

P/N	Cable Group	Impedance
160-M633	N/A	50

ADAPTOR



BULKHEAD PLUG TO SMA JACK  
ADAPTOR

P/N	Cable Group	Impedance
160-A010	N/A	50