

BMA 85 SERIES

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

MECHANICAL

MATERIALS:

Bodies: Stainless Steel Per ASTM-A-582
Contacts: Beryllium Copper Per ASTM-B-196
Insulators: Teflon (PTFE) Per ASTM-D-1457
Gasket (O'Ring): Silicone Rubber ZZ-R-765

PLATING:

Gold per Mil-G-45204
Copper Per Mil-C-14550
Nickel Per QQ-N-290
Passivate per Mil-F-14072

FINISHES* (Add letter to end of part number)

Bodies: .000030 Min. Gold Over .000050 Min. Nickel or Passivated
Contacts: .000050 Min. Gold Over .000050 Min. Nickel
Other Metal Parts: Gold Plated or Passivated to meet the environmental requirements

MATING CHARACTERISTICS

Engagement: 3 lbs. Max.
Disengagement: 1.5 lbs. Max.
Durability: 1000 Cycles
Center Contact Retention: 6 lbs. Min.
Radial Misalignment:
 Rigid Mount: +/- .004 inch.
 Float Mount: +/- .020 inch

ELECTRICAL

Impedance: 50 Ohms
Frequency Range: DC to 22 GHz
Insulation Resistance: 5000 Megohms Min.
Power Rating: 300 Watts @ 3 GHz. (Sea level and room temperature).
Temperature Rating: -65°C to +165°C
DMW: 1500 Volts RMS (RG-402); 1000 Volts RMS (RG-405)
RF High Potential at 5 MHz: 1000 Volts RMS (RG-402), 670 Volts RMS (RG-405)
Contact Resistance: Center Contact - 2.0 Milliohms
 Outer Contact - 2.0 Milliohms
VSWR: 1.02 + .005f (GHz); DC to 18 GHz / 1.02 + .008f (GHz); 18 GHz to 22 GHz (RG-402/U)
 1.05 + .005f (GHz); DC to 18 GHz / 1.05 + .009f (GHz); 18 GHz to 22 GHz (RG-405/U)
Corona Level: 70,000 Ft. - 375 Volts (RG-402); 335 Volts (RG-405)
Insertion Loss (dB Max.): .03 x $\sqrt{\text{Frequency, GHz}}$

ENVIRONMENTAL

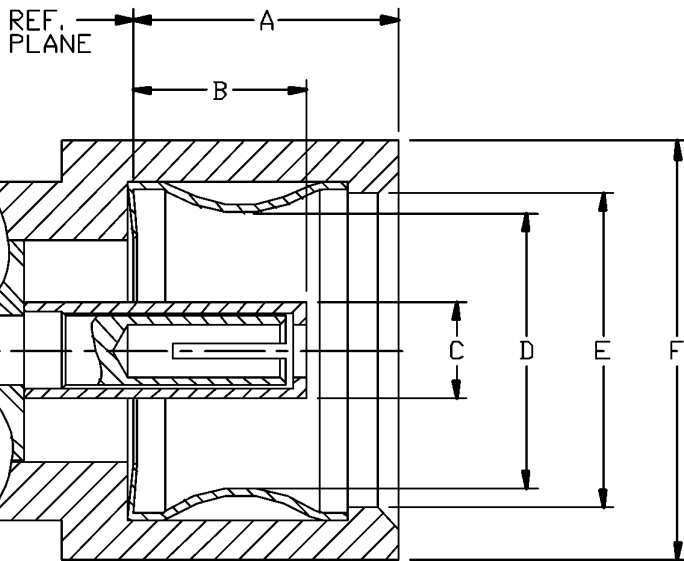
Vibration: MIL-STD-202, Method 204, Test Condition D.
Shock: MIL-STD-202, Method 213, Test Condition I.
Thermal Shock: MIL-STD-202, Method 107, Test Condition B.
Corrosion: MIL-STD-202, Method 101, Test Condition B.
Temperature Cycling: MIL-STD-202, Method 107, Condition C.
High Temperature Test: MIL-STD-202, Method 108A, Condition D.
Moisture Resistance: MIL-STD-202, Method 106.



BMA 85 SERIES

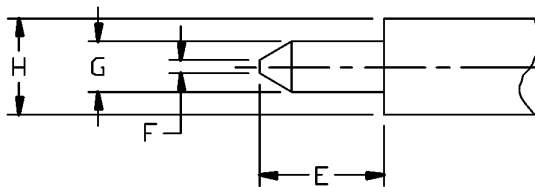
Interface Drawings

DIMENSIONS ARE TO MIL-STD-348A.

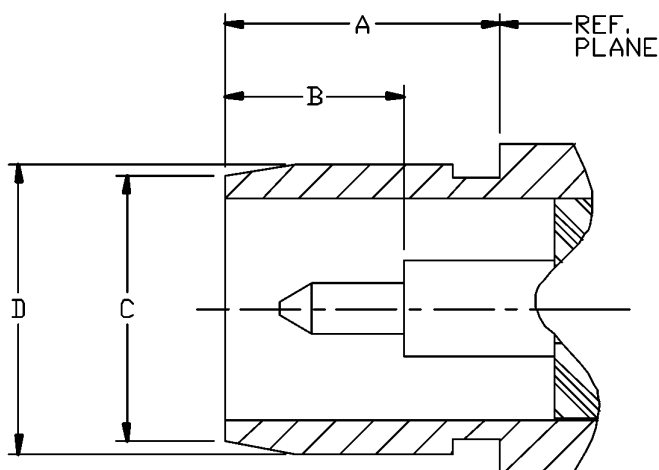


RECEPTACLE

	INCH	[mm]	SUFFIX
A	.197	[5.00]	MAX.
B	.115 .127	[2.92] [3.23]	
C	ø.070	[ø1.78]	NOM.
D	ø.200	[ø5.08]	MAX.
E	ø.225	[ø5.72]	MIN.
F	ø.300	[ø7.62]	NOM.



PLUG



	INCH	[mm]	SUFFIX
A	.198	[5.03]	MIN.
B	.128	[3.25]	MIN.
C	ø.192	[ø4.88]	NOM.
D	ø.209 ø.211	[ø5.31] [ø5.36]	
E	.090	[2.29]	NOM.
F	ø.015	[ø0.38]	MAX.
G	ø.0354 ø.0370	[ø0.90] [ø0.94]	
H	ø.070	[ø1.78]	NOM.



THE PHOENIX COMPANY
of CHICAGO, INC.

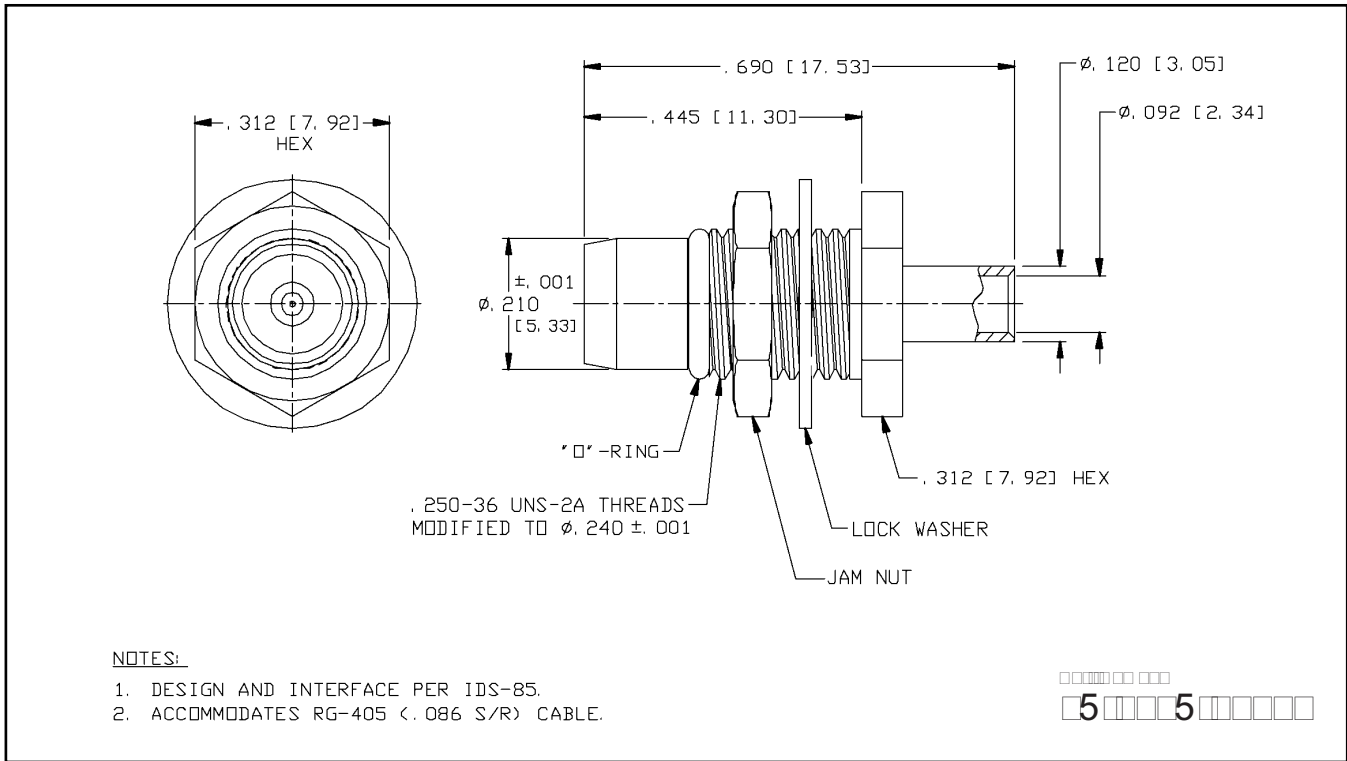
Dimensions are subject to change without notice.
555 Pond Drive • Wood Dale, IL 60191-1192 • Toll Free (800)323-9562

PALCO CONNECTOR

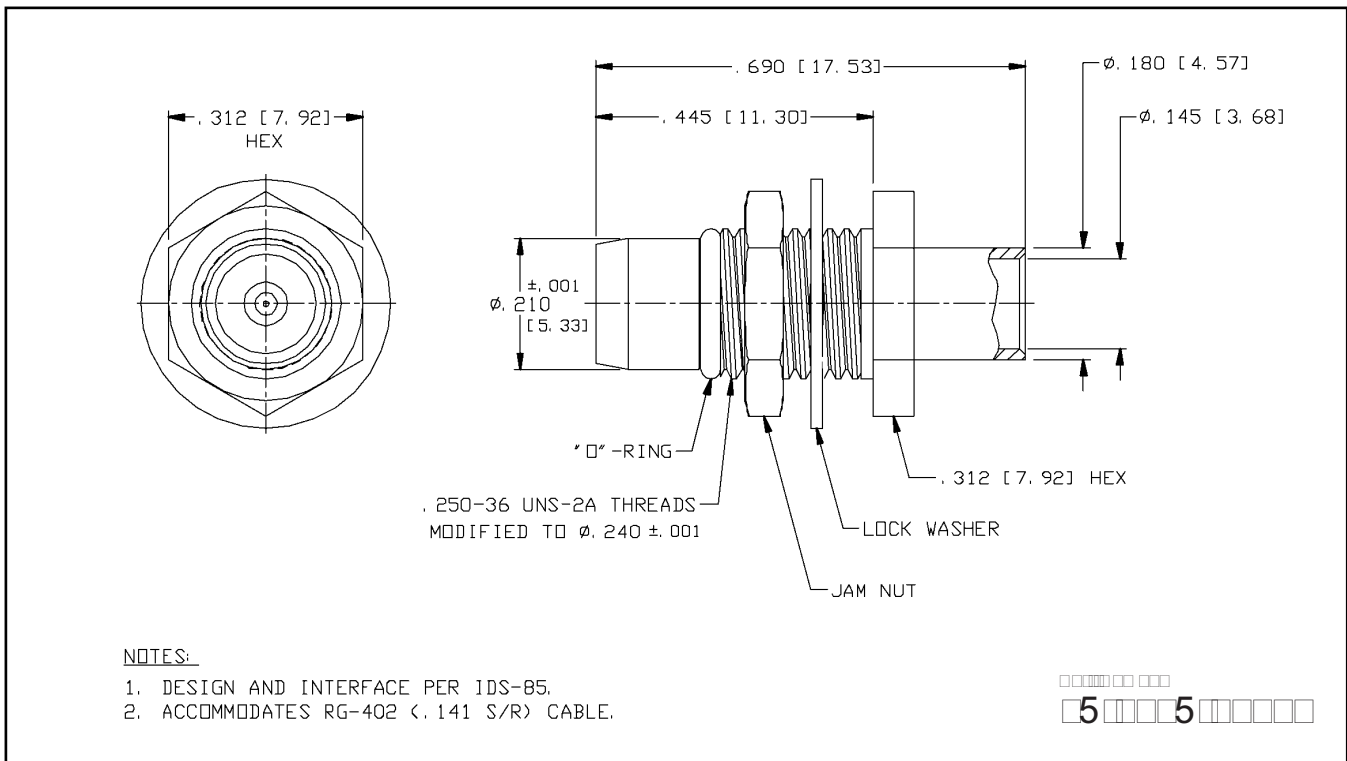
A subsidiary of The Phoenix Company

BMA 85 SERIES

B □ □ □ M □ □ □ □ □ □ B □ □ □ □ □ □ □ □ □ □ S □ □ □ □ R □ □ □ 5

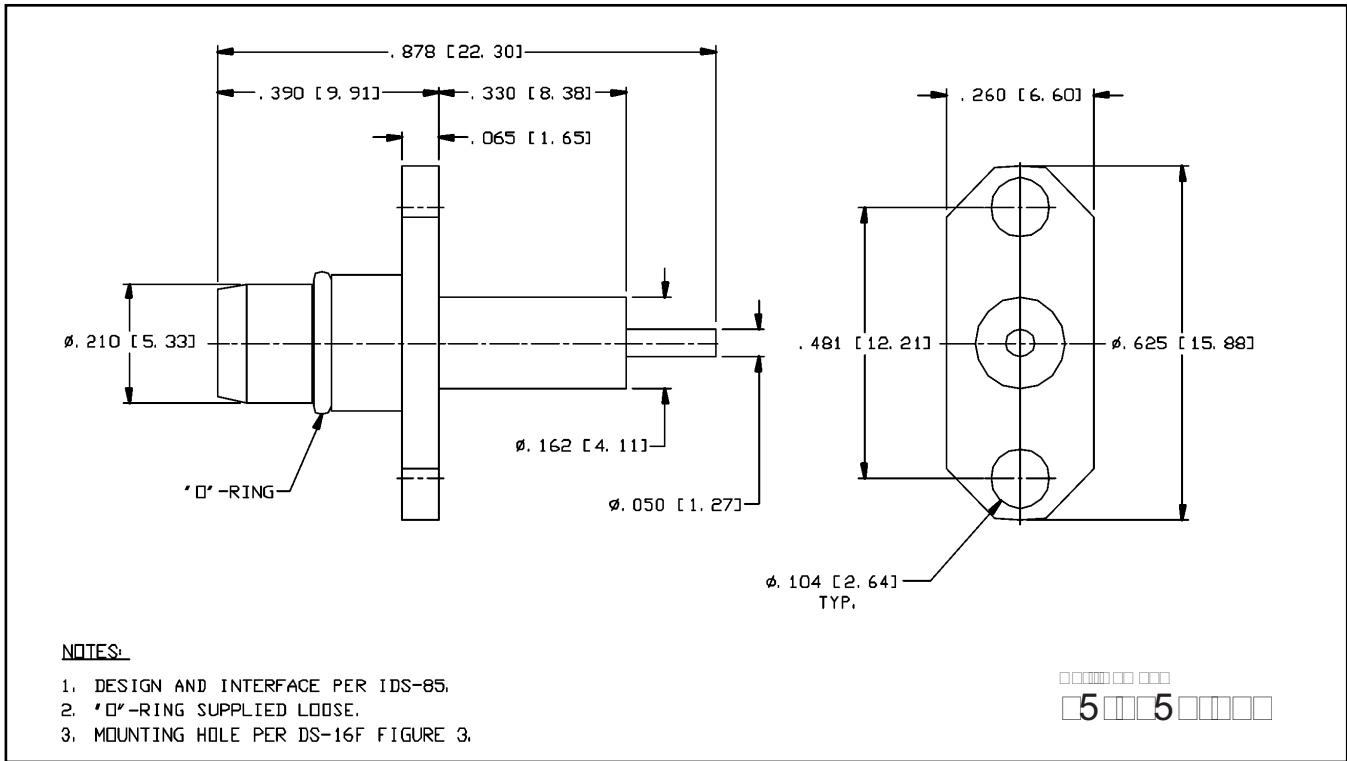


B □ □ □ M □ □ □ □ □ □ B □ □ □ □ □ □ □ □ □ □ S □ □ □ □ R □ □ □ □

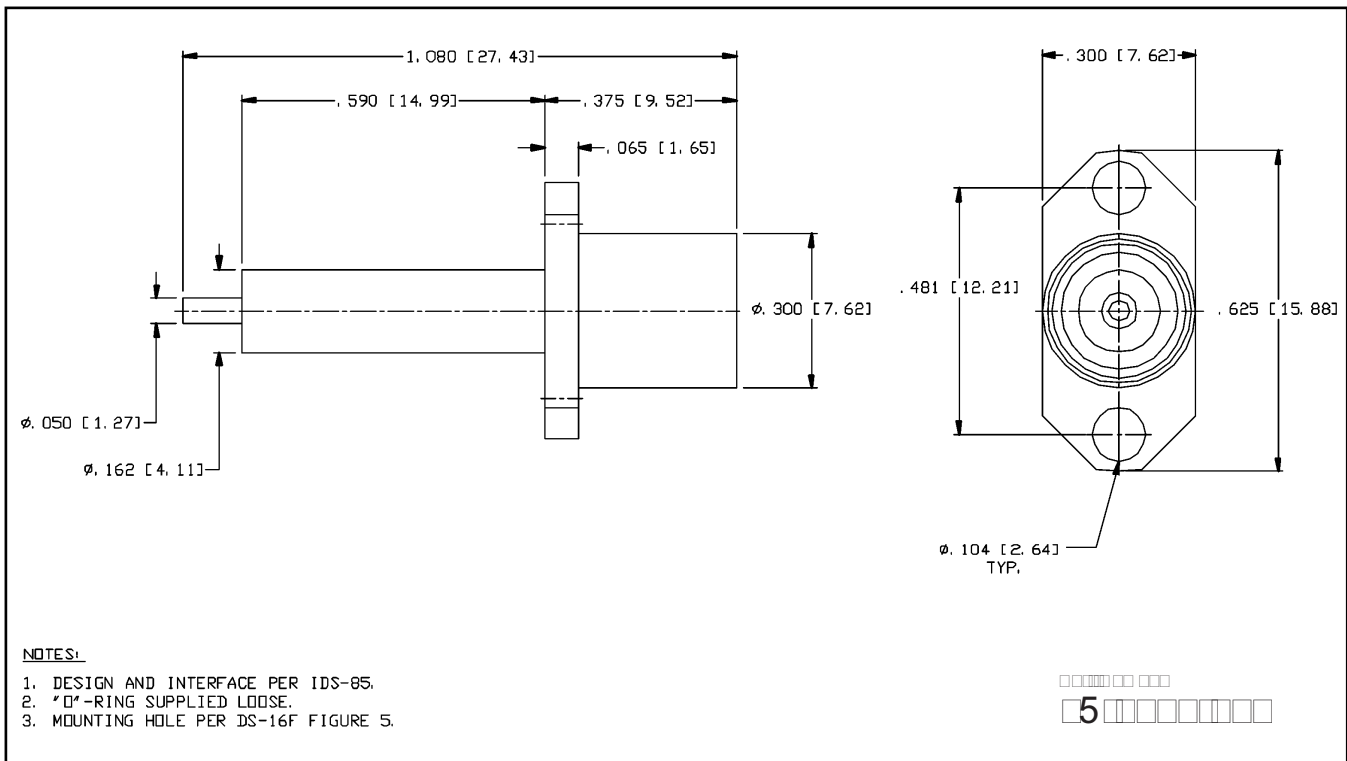


BMA 85 SERIES

BMA B M M

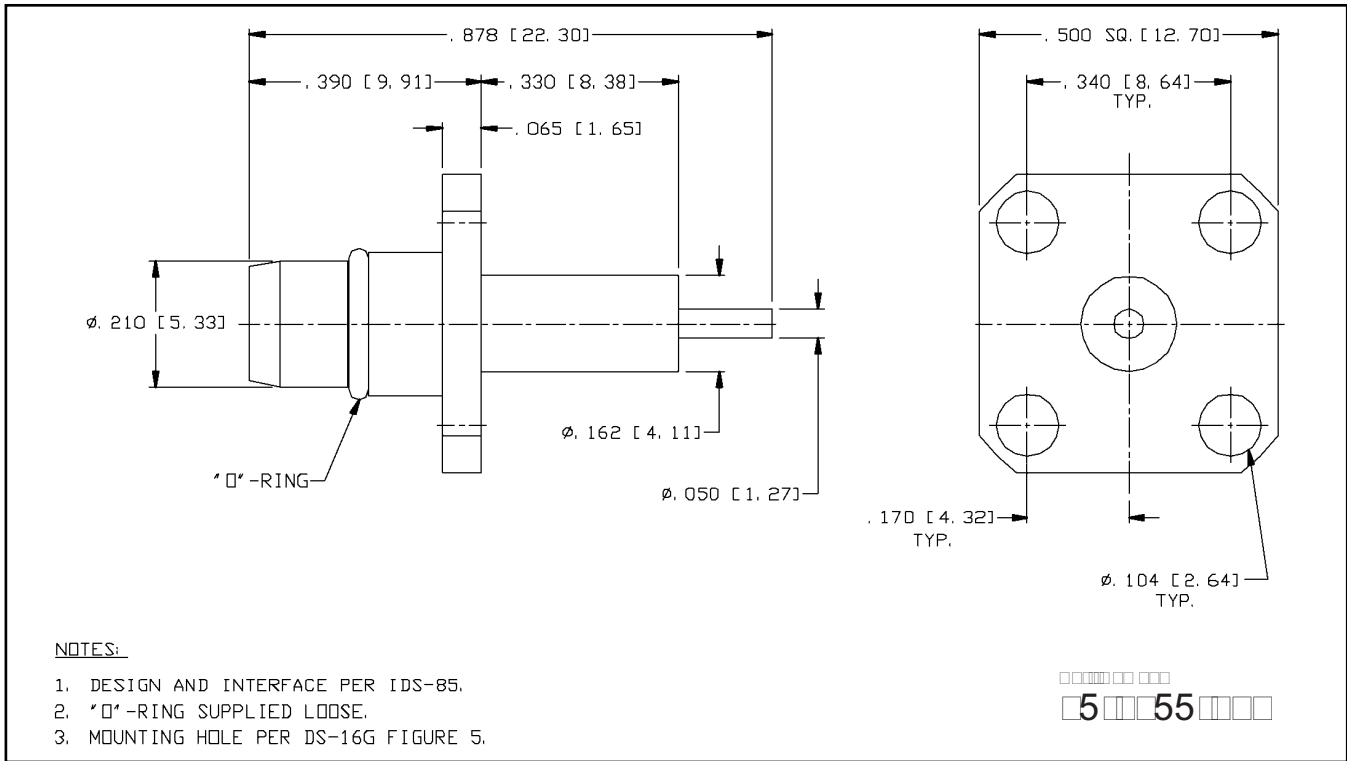


BMA B M M

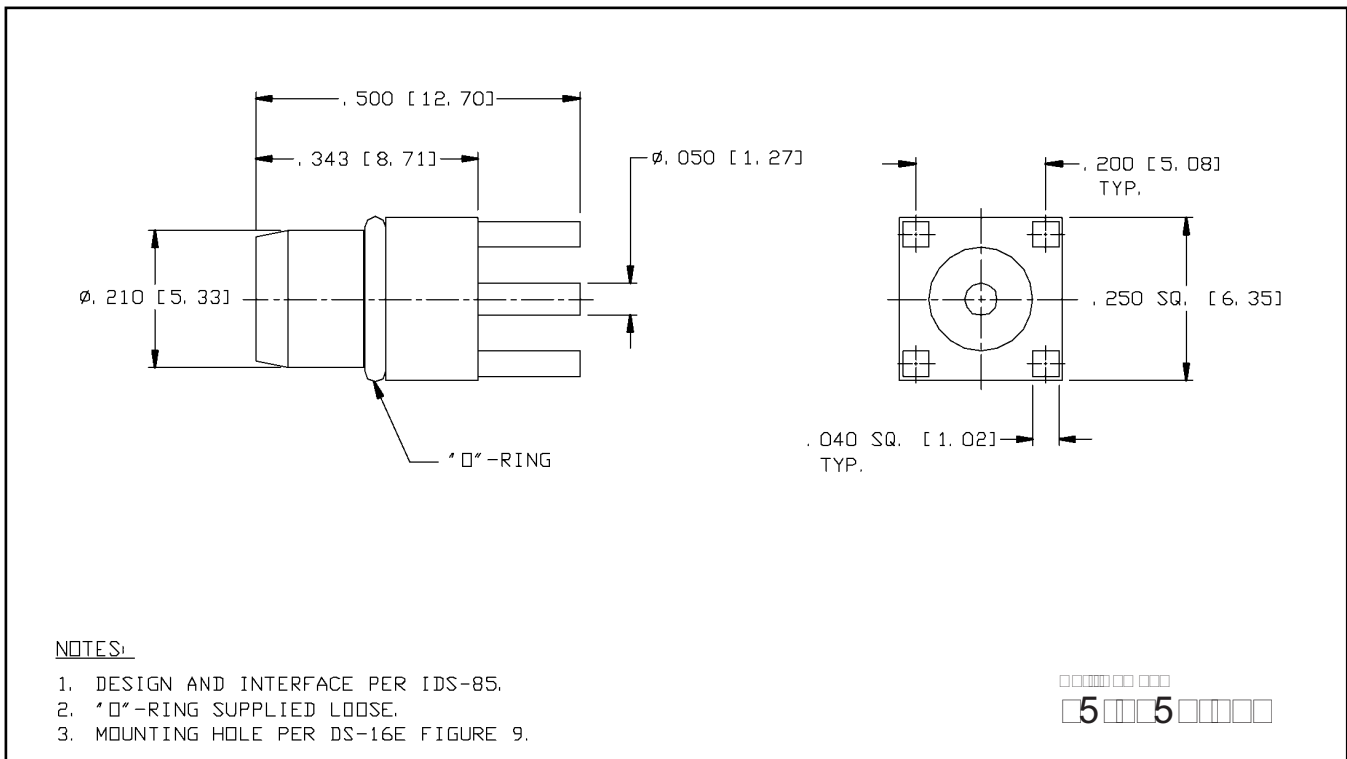


BMA 85 SERIES

BMA B M M



BMA B M B M



BMA 8 SERIES

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

MECHANICAL

MATERIALS: Bodies: Brass Per ASTM-B-16 Contacts: Beryllium Copper Per ASTM-B-196 Insulators: Teflon (PTFE) Per ASTM-D-1457 Gasket (O'Ring): Silicone Rubber ZZ-R-765	PLATING: Gold per Mil-G-45204 Copper Per Mil-C-14550 Nickel Per QQ-N-290
---	--

FINISHES* (Add letter to end of part number)

Bodies: .000030 Min. Gold Over .000050 Min. Nickel over .000050 Max. Cooper Flash
or .000200 Min. Nickel (bright) over .000050 Max. Cooper
Contacts: .000050 Min. Gold Over .000050 Min. Nickel
Other Metal Parts: Gold Plated or Passivated to meet the environmental requirements

MATING CHARACTERISTICS

Engagement: 3 lbs. Max.
Disengagement: 1.5 lbs. Max.
Durability: 500 Cycles
Center Contact Retention: 6 lbs. Min.
Radial Misalignment:
Rigid Mount: +/- .004 inch.
Float Mount: +/- .020 inch

ELECTRICAL

Impedance: 50 Ohms
Frequency Range: DC to 22 GHz
Insulation Resistance: 5000 Megohms Min.
Power Rating: 300 Watts @ 3 GHz. (Sea level and room temperature).
Temperature Rating: -65°C to +165°C
DMW: 1500 Volts RMS (RG-402); 1000 Volts RMS (RG-405)
RF High Potential at 5 MHz: 1000 Volts RMS (RG-402), 670 Volts RMS (RG-405)
Contact Resistance: Center Contact - 2.0 Milliohms
Outer Contact - 2.0 Milliohms
VSWR: 1.02 + .005f (GHz); DC to 18 GHz / 1.02 + .008f (GHz); 18 GHz to 22 GHz (RG-402/U)
1.05 + .005f (GHz); 18 to 22 GHz / 1.05 + .009f (GHz); 18 GHz to 22 GHz (RH-405/U)
Corona Level: 70,000 Ft. - 375 Volts (RG-402); 335 Volts (RG-405)
Insertion Loss (dB Max.): .03 x $\sqrt{\text{Frequency, GHz}}$

ENVIRONMENTAL

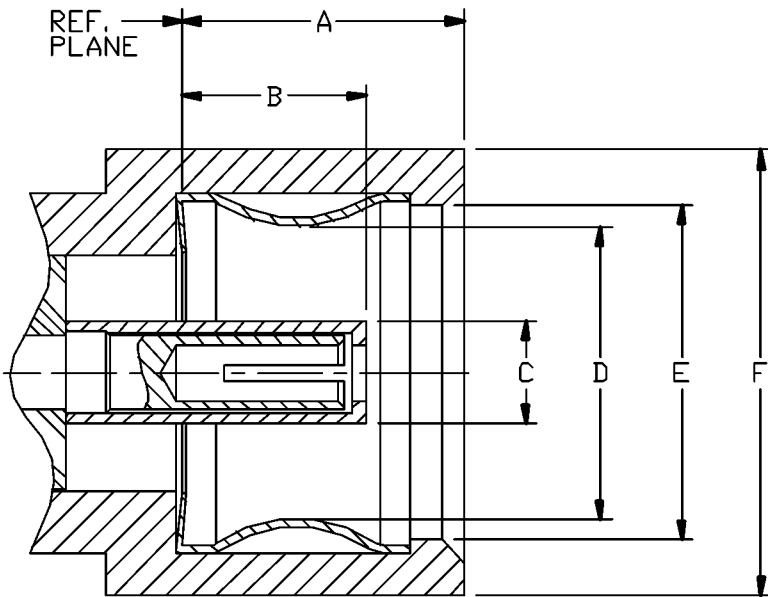
Vibration: MIL-STD-202, Method 204, Test Condition D.
Shock: MIL-STD-202, Method 213, Test Condition I.
Thermal Shock: MIL-STD-202, Method 107, Test Condition B.
Corrosion: MIL-STD-202, Method 101, Test Condition B.
Temperature Cycling: MIL-STD-202, Method 107, Condition C.
High Temperature Test: MIL-STD-202, Method 108A, Condition D.
Moisture Resistance: MIL-STD-202, Method 106.



BMA 8 □ SERIES

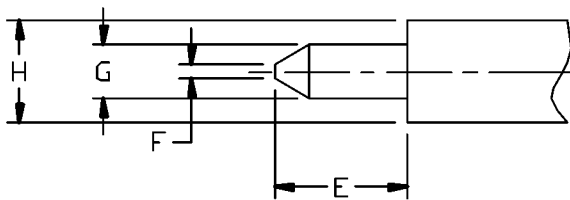


DIMENSIONS ARE TO MIL-STD-348A.

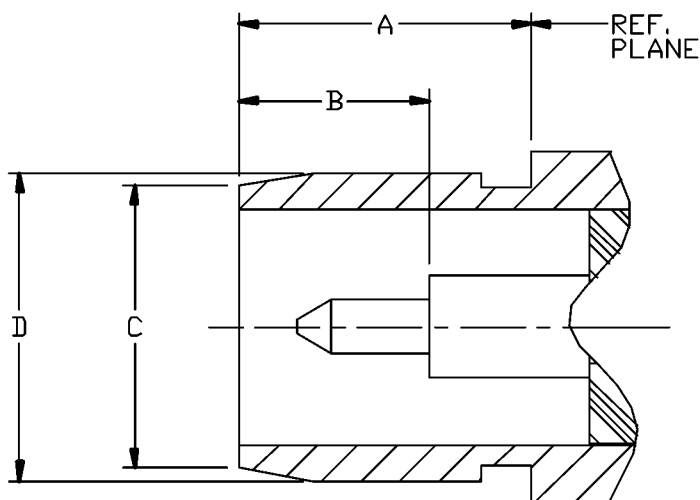


RECEPTACLE

	INCH	[mm]	SUFFIX
A	.197	[5.00]	MAX.
B	$\frac{.115}{.127}$	$\frac{[2.92]}{[3.23]}$	
C	$\phi .070$	$[\phi 1.78]$	NOM.
D	$\phi .200$	$[\phi 5.08]$	MAX.
E	$\phi .225$	$[\phi 5.72]$	MIN.
F	$\phi .300$	$[\phi 7.62]$	NOM.



PLUG

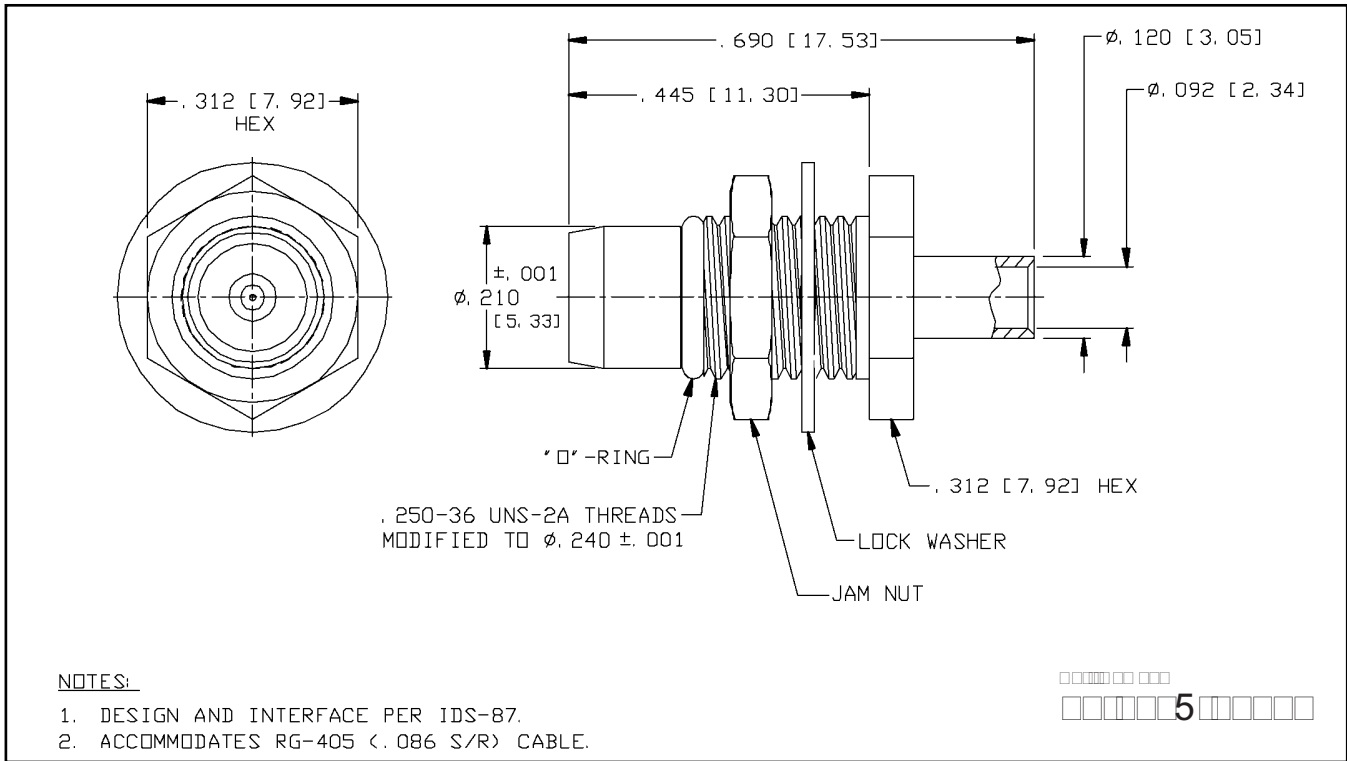


	INCH	[mm]	SUFFIX
A	.198	[5.03]	MIN.
B	.128	[3.25]	MIN.
C	$\phi .192$	$[\phi 4.88]$	NOM.
D	$\frac{\phi .209}{\phi .211}$	$\frac{[\phi 5.31]}{[\phi 5.36]}$	
E	.090	[2.29]	NOM.
F	$\phi .015$	$[\phi 0.38]$	MAX.
G	$\frac{\phi .0354}{\phi .0370}$	$\frac{[\phi 0.90]}{[\phi 0.94]}$	
H	$\phi .070$	$[\phi 1.78]$	NOM.



BMA 8 □ SERIES

B □ □ □ M □ □ □ □ □ □ B □ □ □ □ □ □ □ □ □ □ S □ □ □ □ R □ □ □ 5



B □ □ □ M □ □ □ □ □ □ B □ □ □ □ □ □ □ □ □ □ S □ □ □ □ R □ □ □ □

