

# ENG FILE COPY

SF2991-6002

**NOTES:**

**1. MATING:**

Interface dimensions per Mil-C-39012/SMA Series and Solitron/Microwave MD-107.

**2. MATERIALS:**

All Metal parts except Contacts and Pin:

Stainless Steel per QQ-S-764, Type 303, Cond. A.

Contacts:

Beryllium Copper per QQ-C-530, Cond. HT, Alloy 173.

Pin:

Kovar.

Glass Bead:

Corning #7052.

O'Ring:

Ethylene Propylene.

Insulator:

Teflon per Mil-P-19468 and L-P-403, Type I.

**3. FINISH:**

All Metal parts except Contacts and Pin:

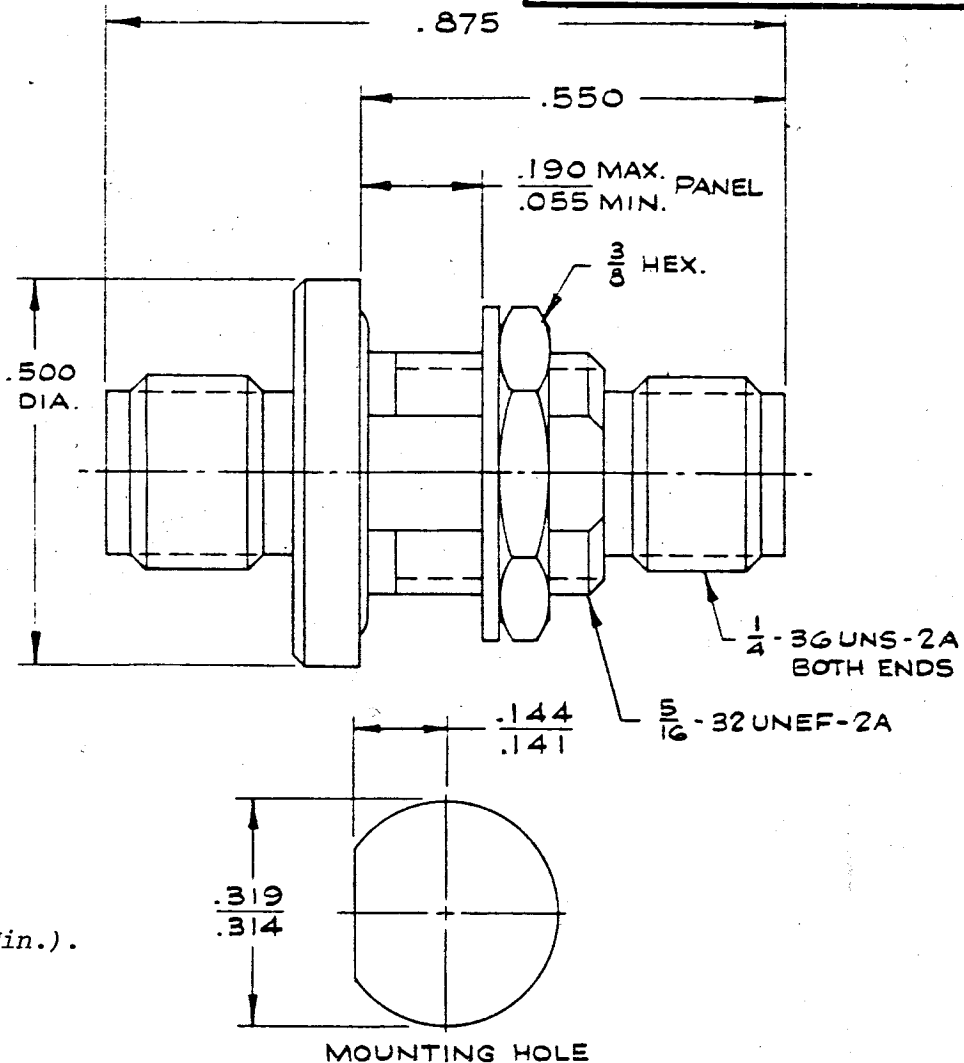
Passivate per QQ-P-35A, Type I.

Contacts:

Gold per Mil-G-45204, Type II, Grade C, Class 2; over Copper per Mil-C-14550, Class 4.

Pin:

Gold per Mil-G-45204, Type II, Grade C, Class 1; over Nickel per Mil-C-26074, Class 1 (.00015 Min.).



SYM	DESCRIPTION	DATE	APPR.	UNLESS OTHERWISE SPECIFIED 1. REMOVE ALL BURRS 2. BREAK ALL CORNERS & EDGES .005 R MAX. 3. CHAMFER 1ST & LAST THREADS 45° 4. SURFACE ROUGHNESS 63 ✓ MIL-STD-10 5. DIAMETERS ON COMMON CENTERS TO BE CONCENTRIC WITHIN T.I.R. 6. ALL DIMENSIONS ARE AFTER PLATING	<b>SOLITRON/MICROWAVE</b>		REF.
-	REL. F-6955	2/79	DGG		PORT SALERNO, FLORIDA		ENGINEERING DATA DRAWING
					MATERIAL		TITLE
					FINISH		SMA JACK TO JACK BULKHEAD ADAPTER HERMETIC SEAL
					SCALE	CODE IDENT. NO.	DRAWING NO.
						95077	SF2991-6002
						SHEET 1 OF 2	

"DESIGN CRITERIA"

SF2991-6002

REQUIREMENT	RATING	REQUIREMENT	RATING
Nominal Impedance (ohms)	50	Vibration	MIL-STD-202 method 204 Cond. D (20G's)
Frequency Range (ghz)	DC-18.0		
Voltage Rating (max. vrms)	335	Shock	MIL-STD-202 method 213 Cond. I (100G's)
Temperature Rating (degrees centigrade)	-65 To +165		
VSWR (max.)	1.05 +.010xFGHz	Temperature Cycling	MIL-STD-202 method 102 - Cond. C (-65 <sup>o</sup> C To +200 <sup>o</sup> C)
Insertion Loss (dB max.)	.05x √ FGHz		
RF Leakage (min. dB down)	100 dB-FGHz	Corrosion	MIL-STD-202 method 101 Cond. B (48 hrs.)
RF High Potential (max. vrms)	670 AT 5MHZ		
Dielectric Withstanding Voltage (max. vrms)	1000	Moisture Resistance	MIL-STD-202 method 106 less step 7b
Insulation Resistance (min. megohms)	5000		
Contact Resistance Center Contact (max. milliohms)	16.0	Barometric Pressure (Altitude)	MIL-STD-202 method 105 Cond. C (70,000 ft.) (250 vrms)
Outer Contact (max. milliohms)	2.0		
Center Contact Axial Forces Insertion (max. ounces)	48.0	Hermeticity	1 x 10 <sup>-8</sup> cc/SEC.
Withdrawal (min. ounces)	2.0		
Connector Durability (min. cycles)	500	Captivation Center Contact (Min. Axial Force)	6 Lbs.
Connector Engagement & Disengagement (max. inch lbs.)	2.0		

REMARKS: 1.) RECOMMENDED MATING TORQUE: 7-10 INCH POUNDS.

TITLE	SMA JACK TO JACK BULKHEAD ADAPTER HERMETIC SEAL	SHEET 2 OF 2	DRAWING NO. SF2991-6002	REV. -
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