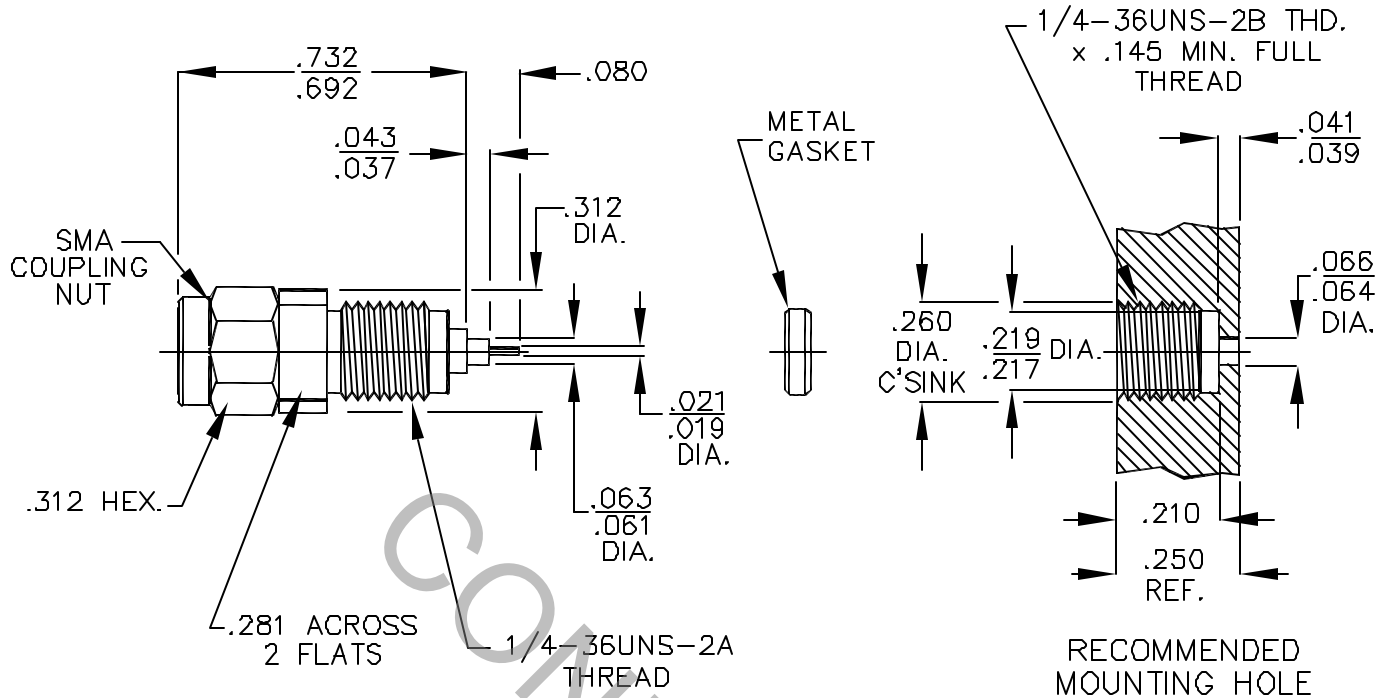


# SPECIFICATION CONTROL DRAWING




1. MATING INTERFACE DIMENSIONS FOR SMA PLUG per MIL-STD-348 (Fig. 310-1).

## 2. ELECTRICAL

FREQUENCY RANGE GHz	_____	DC TO 26.5 GHz.
VSWR (MAX.) *	_____	1.04 + .008 x FGHz.
INSERTION LOSS (dB MAX.) *	_____	.04 dB x $\sqrt{\text{FGHz}}$ .
NOMINAL IMPEDANCE (OHMS)	_____	50
VOLTAGE RATING (MAX. VRMS)	_____	250
RF LEAKAGE (MIN. dB DOWN)	_____	100 dB - FGHz
TEMPERATURE RATING (DEGREES CENTIGRADE)	_____	-65°C TO + 165°C
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	_____	750
INSULATION RESISTANCE (MIN. MEGOHMS)	_____	10,000
CONTACT RESISTANCE		
• CENTER CONTACT (MAX. MILLIOHMS)	_____	12.0
• OUTER CONTACT (MAX. MILLIOHMS)	_____	2.0

\* TERMINATED IN A 50 OHM LOAD

REV.	DCN NO.	DATE	APP.	DIMENSIONS ARE IN INCHES TOLERANCES			 HAVERHILL MA. 01835
AA	03-2181	9/17/03	DC	DECIMALS .X ± .030 .XX ± .010 .XXX ± .005	FRACTIONAL ±/64	ANGULAR X ° ± 1° 0' X ° X' ± 15'	
				DRAWN	DC	DATE 9/17/03	TITLE SMA PLUG, SPARK PLUG HERMETICALLY SEALED WITH METAL GASKET
				APPROVED	DC	DATE 9/17/03	
				CODE IDENT.	SHEET 1 OF 2		DWG. NO. 9830-0431-6220
				2J899			

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

CAPTIVATION—CENTER CONTACT  
 MAX. AXIAL FORCE \_\_\_\_\_ 6.0 LBS.  
 MAX. RADIAL TORQUE \_\_\_\_\_ 2.0 IN. OZ.  
 CENTER CONTACT AXIAL FORCES  
 ● INSERTION (MAX. OUNCES) \_\_\_\_\_ 48.0  
 ● WITHDRAWAL (MIN. OUNCES) \_\_\_\_\_ 2.0  
 CONNECTOR ENGAGEMENT/DISENGAGEMENT (MAX. IN. LBS.) \_\_\_\_\_ 2.0  
 CONNECTOR DURABILITY (MIN. CYCLES) \_\_\_\_\_ 500  
 RECOMMENDED MATING TORQUE  
 ● INTERFACE \_\_\_\_\_ 7 – 10 IN. LBS.

## 4. ENVIRONMENTAL

TEMPERATURE CYCLING \_\_\_\_\_ MIL-STD-202, METHOD 102, COND. C ( -65 °c TO + 200 °c )  
 SHOCK \_\_\_\_\_ MIL-STD-202, METHOD 213, COND. I (100 G's)  
 VIBRATION \_\_\_\_\_ MIL-STD-202, METHOD 204, COND. D (2D G's)  
 MOISTURE RESISTANCE \_\_\_\_\_ MIL-STD-202, METHOD 106, LESS STEP 7b  
 CORROSION \_\_\_\_\_ MIL-STD-202, METHOD 101, COND. B (48 HOURS)  
 BAROMETRIC PRESSURE (ALTITUDE) \_\_\_\_\_ MIL-STD-202, METHOD 105, COND. C ( 70,000 FT. ) ( 190 VRMS )  
 HERMETICITY \_\_\_\_\_  $1 \times 10^{-B}$  cc/SEC.

## 5. MATERIAL

CONNECTOR BODY AND COUPLING NUT \_\_\_\_\_ STAINLESS STEEL PER AMS-5640, TYPE 303, COND. A  
 CONTACT AND RETAINING RING \_\_\_\_\_ BERYLLIUM COPPER PER QQ-C-530, ALLOY 173, COND. H.T.  
 INSULATOR \_\_\_\_\_ TEFLON PER MIL-P-1946B, AND L-P-403, TYPE I  
 GLASS PIN \_\_\_\_\_ KOVAR PER MIL-I-23011  
 GLASS \_\_\_\_\_ CORNING 7070  
 METAL GASKET \_\_\_\_\_ CARBON STEEL PER B1113, CASE HARDENED  
 RUBBER GASKET \_\_\_\_\_ SILICONE RUBBER PER ZZ-R-765, CLASS IIB, GRADE 50 OR 60.

## 6. FINISH

GLASS PIN \_\_\_\_\_ GOLD PER MIL-C-45204, TYPE II, GRADE C, CLASS 1, OVER NICKEL PER QQ-N-290, (.00010 MIN. THK.)  
 CONNECTOR BODY AND COUPLING NUT \_\_\_\_\_ PASSIVATE PER QQ-P-35A, TYPE I  
 METAL GASKET \_\_\_\_\_ NICKEL PER MIL-C-28074, CLASS 1 (.0001 MIN. THK.) OVER COPPER PER MIL-C-14550, CLASS 4.  
 CONTACT \_\_\_\_\_ GOLD per MIL-C-45204, TYPE II, GRADE C, CLASS 2 (.000100 Minimum Thickness) OVER NICKEL per QQ-N-290, CLASS 1 (.000100 Minimum Thickness) OVER COPPER per MIL-C-14550 (.000010 Minimum Thickness).  
 INSULATOR AND RETAINING RING \_\_\_\_\_ N/A