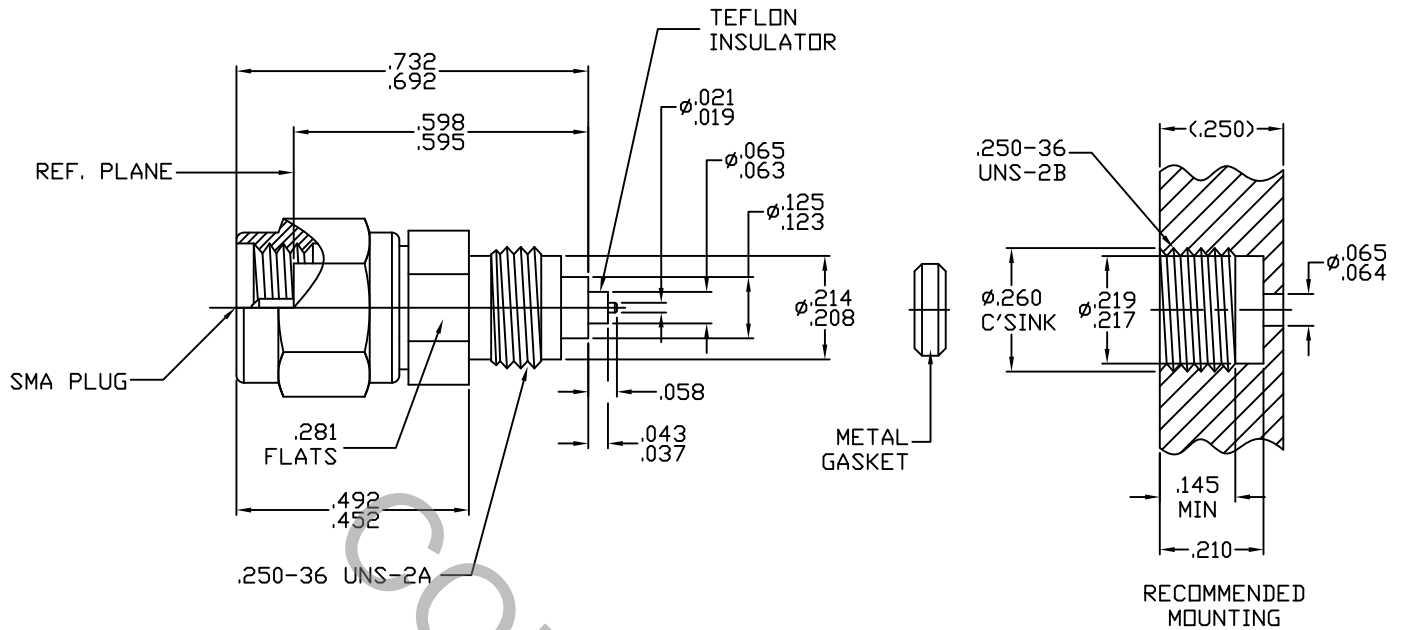


# SPECIFICATION CONTROL DRAWING



NAD-CAP PLATING.

1. MATING INTERFACE DIMENSIONS PER MIL-STD-348A, Fig. 310-1 (SMA, PLUG).

2. ELECTRICAL

FREQUENCY RANGE GHz	_____	DC TO 18.0 GHz.
VSWR (MAX.) *	_____	1.05 + .010 x FGHZ.
INSERTION LOSS (dB MAX.) *	_____	.04 dB x √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

**RoHS**  
COMPLIANT

This Document contains proprietary and confidential information.

REV.	DCN NO.	DATE	APP.	DIMENSIONS ARE IN INCHES TOLERANCES			 HAVERHILL MA. 01835
				DECIMALS	FRACTIONAL	ANGULAR	
AA	14-2494	11/25/14	TS	.X ± .030 .XX ± .010 .XXX ± .005	±/64	X ° ± 1 0' X ° X' ± 15'	
AB	15-1291	2/26/15	TS				
				DRAWN	TS	DATE 11/25/14	TITLE SMA PLUG, SPARK PLUG HERMETICALLY SEALED
				APPROVED	DC	DATE 11/25/14	
				CODE IDENT.			DWG. NO. 9830-0431-6201
				2J899	SHEET 1 OF 2		

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

CAPTIVATION-CENTER CONTACT	
MAX. AXIAL FORCE _____	6.0 LBS.
MAX. RADIAL TORQUE _____	N/A
CENTER CONTACT AXIAL FORCES	
● INSERTION (MAX. OUNCES) _____	48.0
● WITHDRAWAL (MIN. OUNCES) _____	1.0
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 (20 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 _____	$1 \times 10^{-8}$ cc/SEC.

## 5. MATERIAL

CONNECTOR BODY AND COUPLING NUT _____	STAINLESS STEEL PER ASTM A 581, TYPE 303, COND. A
CONTACT AND RETAINING RING _____	BERYLLIUM COPPER PER ASTM B 196/B, 196M-03, COPPER ALLOY No. UNS C17300, TEMPER TD04.
INSULATOR _____	TEFLON PER ASTM D 1710-02, TYPE 1, GRADE 1, CLASS B.
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

## 6. FINISH

GLASS PIN _____	GOLD PER ASTM B 488, TYPE 1, CODE C, CLASS 1.25 (.000050 MIN. THK.) OVER NICKEL PER SAE-AMS-QQ-N-290 CLASS 1 (.00010 MIN. THK.)
CONNECTOR BODY AND COUPLING NUT _____	PASSIVATE PER AMS-2700, TYPE 2, CLASS 4.
METAL GASKET _____	SILVER PER QQ-S-365 TYPE II, GADE B, (.0001 MIN. THK.) OVER NICKEL PER MIL-C-26074, CLASS 1 (.0001 MIN. THK.)
CONTACT _____	GOLD PER ASTM-B-488, TYPE I, CODE C, CLASS 1.27 (.000050 MIN. THK.) OVER NICKEL PER SAE-AMS-QQ-N-290 CLASS 1 (.000050 MIN. THK.) OVER COPPER PER AMS-2418 (.000010 MIN. THK.)
INSULATOR AND RETAINING RING _____	N/A