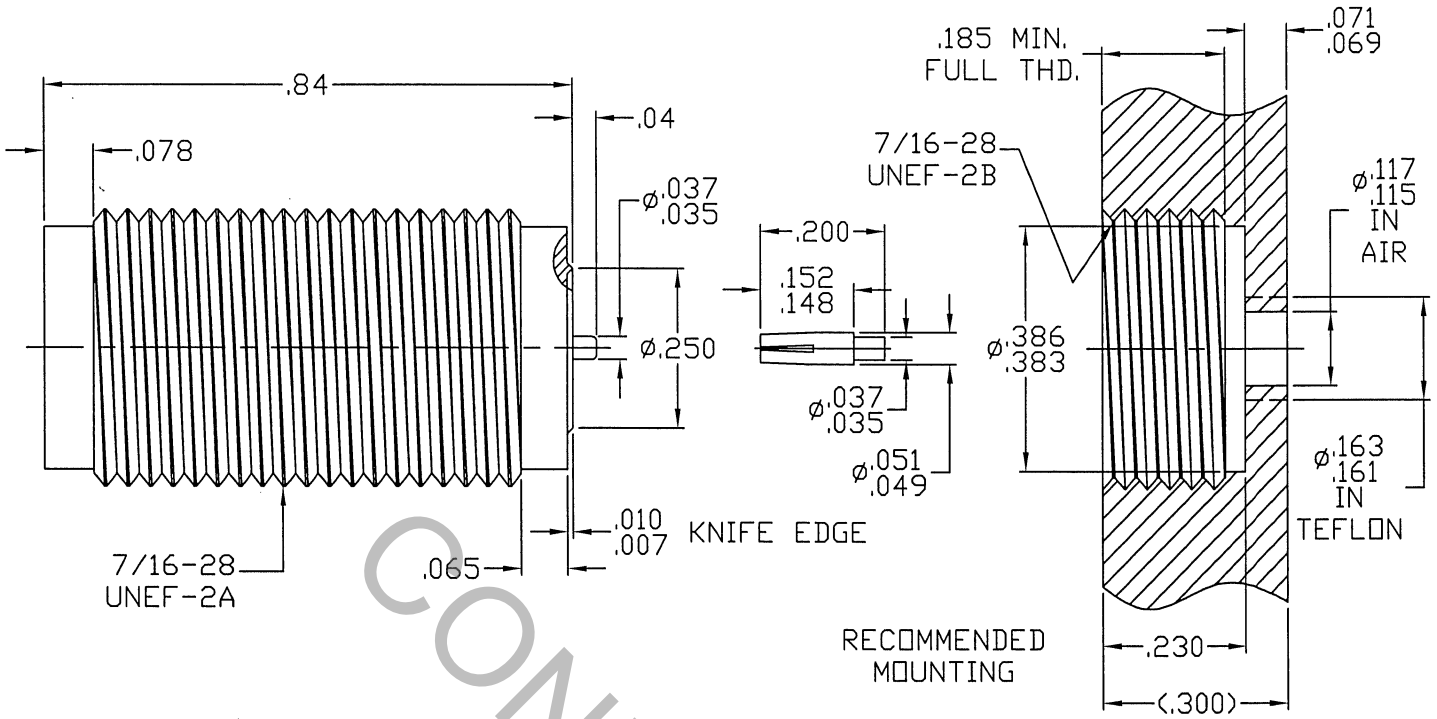
# SPECIFICATION CONTROL DRAWING

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1. MATING INTERFACE DIMENSIONS Per MIL-STD-348 Fig. 313.2 (KTNC JACK).

2. ELECTRICAL

| | |
|---|---|
| FREQUENCY RANGE GHz | DC TO 18.0 GHz |
| VSWR (MAX.) * | 1.08 + .015 x FGHz |
| INSERTION LOSS (dB MAX.) * | .06 dB x $\sqrt{FGHz}$ |
| NOMINAL IMPEDANCE (OHMS) | 50 |
| VOLTAGE RATING (MAX. VRMS) | 500 |
| RF LEAKAGE (MIN. dB DOWN) | −100 dB − FGHz |
| TEMPERATURE RATING (DEGREES CENTIGRADE) | −65°c TO + 165°c |
| DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS) | 1,500 |
| INSULATION RESISTANCE (MIN. MEGOHMS) | 5,000 |
| 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. |
|---|---|---|---|
| – | 321 | 5/87 | CDM |
| AA | 06-2468 | 12/5/06 | TS |
| AB | 06-2528 | 12-14-06 | DS |
| | | | |
| | | | |
| | | | |
| | | | |

DIMENSIONS ARE IN INCHES
TOLERANCES

| DECIMALS | FRACTIONAL | ANGULAR |
|---|---|---|
| .X ±.030<br>.XX ±.010<br>.XXX ±.005 | ± 1/64 | X °±1°0'<br>X ° X' ±15' |

dynawave INCORPORATED
HAVERHILL, MA 01835

DRAWN TS DATE 3/88

APPROVED DGG DATE 3/88

TITLE
KTNC JACK
HERMETIC SPARK PLUG
WITH SLIDING CONTACT

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 8530-0441-6436

# 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) — INTERFACE 32.0
- WITHDRAWAL (MIN. OUNCES) — INTERFACE 2.0

CONNECTOR ENGAGEMENT/DISENGAGEMENT (MAX. LBS.) — 2.0

CONNECTOR DURABILITY (MIN. CYCLES) — 500

RECOMMENDED MATING TORQUE — 20 – 25 IN. LBS.

RECOMMENDED MOUNTING TORQUE — 30 – 32 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. ) ( 375 VRMS ) |
| HERMETICITY | $1 \times 10^{-8}$ cc/SEC. |

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## 5. MATERIAL

| | |
|---|---|
| BODY | STAINLESS STEEL PER ASTM–A–581, TYPE 303, COND. A |
| CONTACT | BERYLLIUM COPPER PER ASTM B196–90, COPPER ALLOY No. UNS–C17300, TEMPER TD04. |
| INSULATOR | TEFLON PER ASTM–D1710. |
| GLASS PIN | KOVAR PER MIL–I–23011. |
| GLASS | CORNING 7070 |

## 6. FINISH

| | |
|---|---|
| BODY | GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 1.25<br>(.000050 MIN. THK.) OVER NICKEL per QQ–N–290<br>(.000100 MIN. THK.) OVER COPPER per MIL–C–14550<br>(.000040 MIN. THK.) |
| CONTACT | GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 2.5<br>(.000100 MIN. THK.) OVER NICKEL per QQ–N–290<br>(.000050 MIN. THK.) OVER COPPER per MIL–C–14550<br>(.000010 MIN. THK.) |
| INSULATOR & GLASS | N/A |