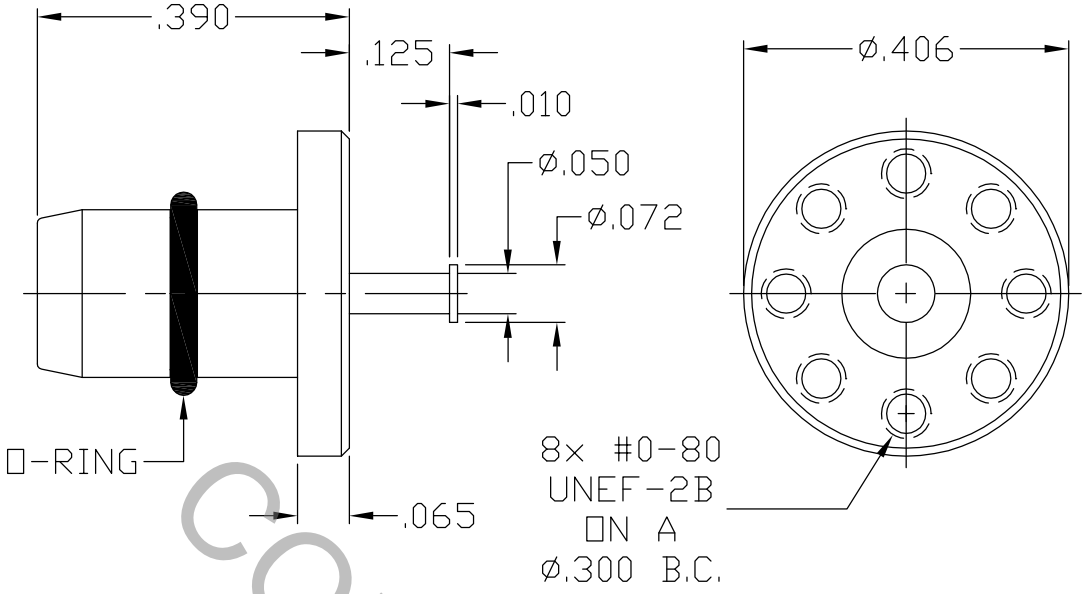
# SPECIFICATION CONTROL DRAWING




NOTE: THE CONTACT IS SHIPPED LOOSE IN THE CONNECTOR BAG.

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1. MATING INTERFACE DIMENSIONS MIL-STD-348 Fig. 321.1 (BMA PLUG).

2. ELECTRICAL

| | |
|---|---|
| FREQUENCY RANGE GHz | DC TO 26.5 GHz |
| VSWR (MAX.) ❋ | 1.05 + .006 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) | 5,000 |
| CONTACT RESISTANCE | |
| • CENTER CONTACT (MAX. MILLIOHMS) | 3.0 |
| • OUTER CONTACT (MAX. MILLIOHMS) | 2.0 |

❋ TERMINATED IN A 50 OHM LOAD

| REV. | DCN NO. | DATE | APP. |
|---|---|---|---|
| AA | 06-2096 | 9/6/06 | DC |

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' |

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| | |
|---|---|
| DRAWN DC | DATE 9/6/06 |
| APPROVED DC | DATE 9/6/06 |

TITLE BMA PLUG, SURFACE LAUNCH NON CAPTURED CONTACT TURRET TERMINAL

| CODE IDENT. | SHEET 1 OF 2 | DWG. NO. |
|---|---|---|
| 2J899 | | 2880-0031-2725 |

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

CAPTIVATION–CENTER CONTACT

| | |
|---|---|
| MAX. AXIAL FORCE | N/A |
| MAX. RADIAL TORQUE | N/A |

CENTER CONTACT AXIAL FORCES

| | |
|---|---|
| ● INSERTION (MAX. OUNCES) | N/A |
| ● WITHDRAWAL (MIN. OUNCES) | N/A |
| CONNECTOR ENGAGEMENT/DISENGAGEMENT (MAX. IN. LBS.) | N/A |
| CONNECTOR DURABILITY (MIN. CYCLES) | 500 |

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## 4. ENVIRONMENTAL

| | |
|---|---|
| TEMPERATURE CYCLING | MIL–STD–202, METHOD 102, COND. C ( –65° c TO + 165° 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 ) |

## 5. MATERIAL

| | |
|---|---|
| BODY | BRASS PER ASTM–B16, TEMPER H02, ALLOY 36000. |
| CONTACT | BERYLLIUM COPPER PER ASTM B196–90, COPPER ALLOY No. UNS–C17300, TEMPER TD04. |
| INSULATOR | TEFLON PER ASTM D 4894–91. |
| O–RING | NITRILE (BUNA–N) PER MIL–P–25732 |

## 6. FINISH

| | |
|---|---|
| BODY | NICKEL PER QQ–N–290, CLASS 1<br>(.000200 MIN. THK.) OVER COPPER PER MIL–C–14550<br>(.000010 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 | N/A |