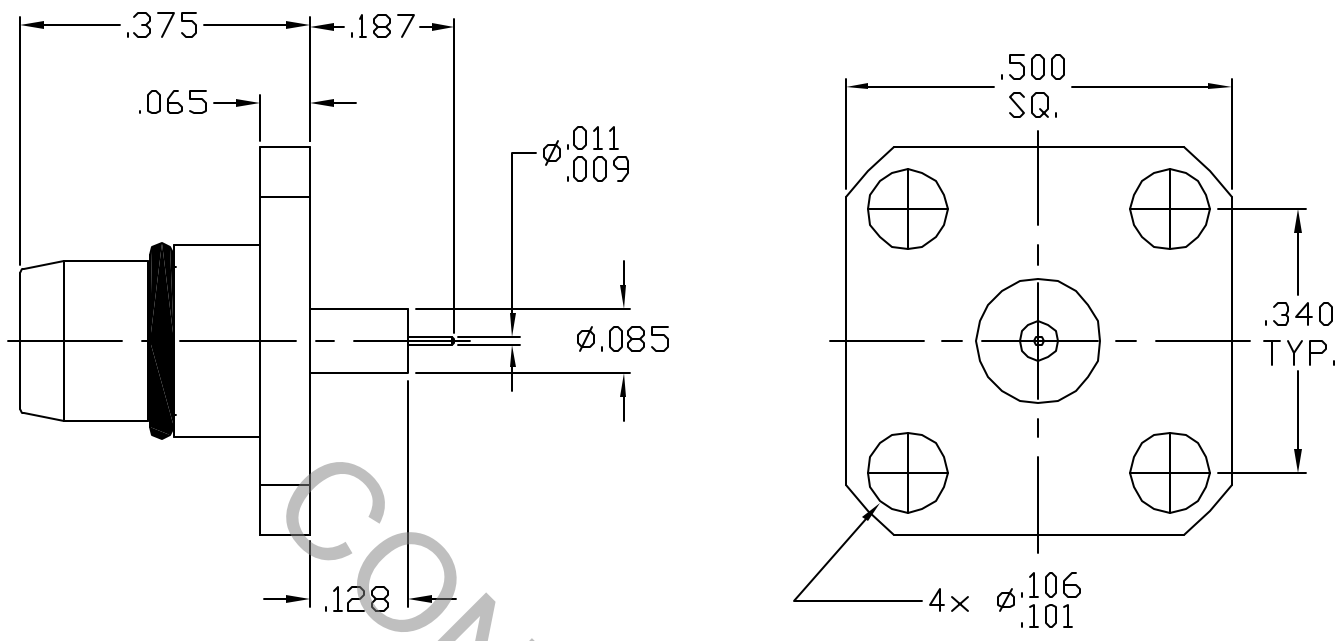
# SPECIFICATION CONTROL DRAWING

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

2. ELECTRICAL

| | |
|---|---|
| FREQUENCY RANGE GHz | DC TO 20.0 GHz |
| VSWR (MAX.) ❁ | 1.10 +.010 FGHz. |
| INSERTION LOSS (dB MAX.) | |
| • BMA INTERFACE GAP (.000 TO .015) | .035 dB x $\sqrt{FGHz}$ |
| • BMA INTERFACE GAP (.016 TO .030) | .050 dB x $\sqrt{FGHz}$ |
| NOMINAL IMPEDANCE (OHMS) | 50 |
| VOLTAGE RATING (MAX. VRMS) | 335 |
| RF LEAKAGE (MIN. dB DOWN) | |
| • BMA INTERFACE BOTTOMED (.000 GAP) | −100 dB − FGHz |
| • BMA INTERFACE GAP (.001 TO .015) | −90 dB − FGHz |
| • BMA INTERFACE GAP (.016 TO .030) | −75 dB − FGHz |
| TEMPERATURE RATING (DEGREES CENTIGRADE) | −65°c TO + 150°c |
| DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS) | 1,000 |
| 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 | 07-1394 | | |
| | | | |
| | | | |
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| | | | |
| | | | |

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: 4/11/07

APPROVED: DC DATE: 4/11/07

TITLE
BMA PLUG, 4 HOLE, FLANGE, ø.010 PIN TERMINAL

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 2854-0031-6203

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

| | |
|---|---|
| CAPTIVATION–CENTER CONTACT | |
| • MIN. AXIAL FORCE | 4.5 LBS. |
| • MIN. RADIAL TORQUE | N/A |
| BMA ENGAGEMENT FORCES | |
| • INSERTION (MAX. OUNCES) | 32.0 |
| • WITHDRAWAL (MIN. OUNCES) | 2.0 |
| BMA DURABILITY (MIN. MATING) | 1,000 |
| RECOMMENDED MATING TORQUE | N/A |

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## 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. ) ( 250 VRMS ) |

## 5. MATERIAL

| | |
|---|---|
| CONNECTOR BODY | STAINLESS STEEL PER ASTM A 582, TYPE 303, COND. A. |
| CENTER CONTACT | BERYLLIUM COPPER PER ASTM B196/B, 196M–03, COPPER ALLOY No. UNS C17300, TEMPER TD04. |
| INSULATOR | TEFLON PER ASTM–D1710–02, TYPE 1, GRADE 1, CLASS B. |
| O'RING | NITRILE (BUNA–N) |

## 6. FINISH

| | |
|---|---|
| CONNECTOR BODY | PASSIVATE PER AMS QQ–P–35, TYPE 2. |
| CENTER CONTACT | GOLD PER ASTM–B–488, TYPE I, CODE C, CLASS 2.50 (.000100 MIN. THK.) OVER NICKEL PER QQ–N–290, (.000050 MIN. THK.) OVER COPPER PER MIL–C–14550 (.000010 MIN. THK.). |
| INSULATOR AND O'RING | N/A |