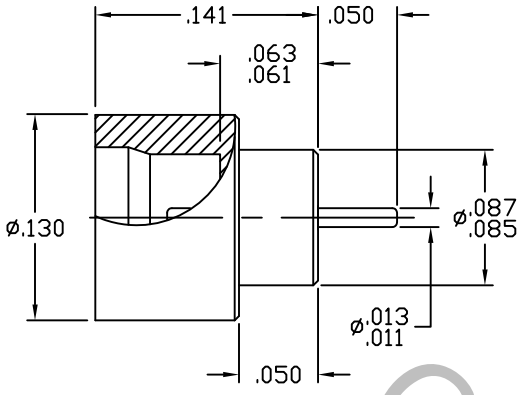
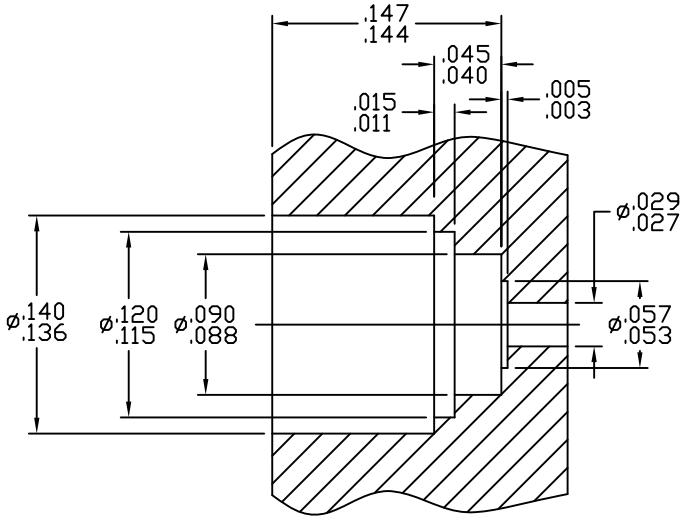
# SPECIFICATION CONTROL DRAWING




RECOMMENDED
MOUNTING HOLE

CONFIDENTIAL

1. MATING INTERFACE DIMENSIONS PER DYNAWAVE SPECIFICATION MD-51-9 (SMPSM, PLUG, SMOOTH BORE)

2. ELECTRICAL

| | |
|---|---|
| FREQUENCY RANGE GHz | DC TO 46.0 GHz. |
| VSWR (MAX.) ❋ | 1.05 + .010 x FGHz. |
| INSERTION LOSS (dB MAX.) ❋ | .05 dB x $\sqrt{\text{FGHz.}}$ |
| NOMINAL IMPEDANCE (OHMS) | 50 |
| VOLTAGE RATING (MAX. VRMS) | 125 |
| RF LEAKAGE (MIN. dB DOWN) | N/A |
| TEMPERATURE RATING (DEGREES CENTIGRADE) | −65 ° c TO +165 ° c |
| DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS) | 375 |
| INSULATION RESISTANCE (MIN. MEGOHMS) | 10,000 |
| CONTACT RESISTANCE | |
| • CENTER CONTACT (MAX. MILLIOHMS) | 10.0 |
| • OUTER CONTACT (MAX. MILLIOHMS) | 2.0 |

❋ TERMINATED IN A 50 OHM LOAD

**RoHS**
COMPLIANT

| REV. | DCN NO. | DATE | APP. |
|---|---|---|---|
| AA | 10-2166 | 12/16/10 | TS |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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' |

SURFACE ROUGHNESS 63 √ MIL-STD 10.

dynawave INCORPORATED
HAVERHILL, MA. 01835

DRAWN TS DATE 12/16/10

APPROVED DC DATE 12/16/10

TITLE SMPSM, MALE,
SMOOTH BORE
HERMETICALLY SEALED SHROUD,
SOLDER-IN

CODE IDENT. 2J899

SHEET 1 OF 2

DWG. NO. 5149-0434-7450

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

CAPTIVATION–CENTER CONTACT
- MIN. AXIAL FORCE ——— 4.5 LBS.
- MIN. RADIAL TORQUE ——— N/A

CONNECTOR ENGAGEMENT FORCES
- INSERTION (MAX. OUNCES) ——— 1.5 LBS.
- WITHDRAWAL (MIN. OUNCES) ——— 0.5 LBS.

CONNECTOR DURABILITY (MIN. MATING) ——— 500

## 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. ) ( 90 VRMS ) |
| HERMITICITY | 1 x $10^{-8}$ cc/SEC. |

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## 5. MATERIAL

| | |
|---|---|
| CONNECTOR BODY AND GLASS PIN | KOVAR PER MIL–I–23011 |
| GLASS | CORNING 7070 |

## 6. FINISH

| | |
|---|---|
| CONNECTOR BODY AND GLASS PIN | GOLD PER ASTM A 488, TYPE 1, CODE C, CLASS 1.25 (.000050 MIN. THICK) OVER NICKEL PER SAE AMS QQ–N–290, CLASS 1 (.000150 MIN. THICK) OVER COPPER PER AMS 2418 (.000010 MIN. THK.) |
| GLASS | N/A |