

ENG. FILE COPY

M39012/55-3026

## NOTES:

1. MATING:

Interface dimensions per Mil-C-39012/SMA Series and Solitron/Microwave MD-107.

2. MATERIALS:

Body, Coupling Nut: Stainless Steel per AMS-5640, Type 303, Cond. A.

Crimp Ring: Copper per WW-T-799, Type K, Form A, Class 1.

Dielectric: Teflon per Mil-P-19468A, and L-P-403, Type I.

Gasket: Silicone Rubber per ZZ-R-765, Class IIB, Grade 50 or 60.

Shrink Tubing: SCL Polyolefin per Mil-I-23053/4, Class 1.

Contact & Lock Ring: Beryllium Copper per QQ-C-530, Cond. H, Alloy 173.

3. FINISH:

Body, Coupling Nut: Passivate per QQ-P-35A, Type I.

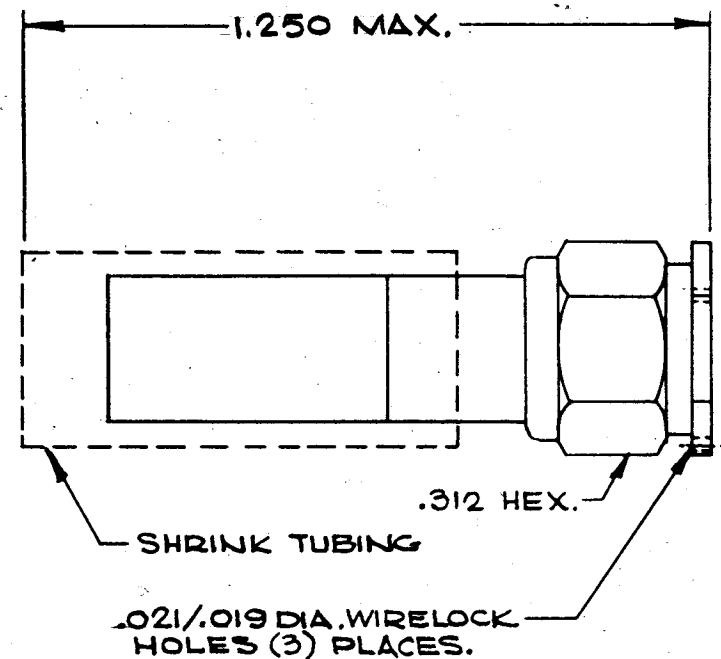
Contact: Gold per Mil-G-45204, Type I, Class 2; over Copper per Mil-C-14550, Class 4.

Crimp Ring: Silver With Iridite per QQ-S-365, Type II, Grade A.

## 4. Cable Assembly Instructions: Per Solitron/Microwave Drawing 300-80-269

## 5. Accommodates RG-174 &amp; 316/U Cables.

## 6. Center Contact Captivated.



| SYM | DESCRIPTION      | DATE | APPR | UNLESS OTHERWISE SPECIFIED                                                                                                                                                                                                                           |                      | SOLITRON/MICROWAVE               |                 | REF                      |                                 |
|-----|------------------|------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------------|-----------------|--------------------------|---------------------------------|
| -   | REL. DCN F-10253 | 2/86 | RD   | 1. ALL DIMENSIONS ARE AFTER PLATING<br>2. BREAK ALL CORNERS & EDGES .005 R MAX.<br>3. CHAMFER 1ST & LAST THREADS 45°<br>4. SURFACE ROUGHNESS 63 ✓ MIL-STD-10<br>5. DIAMETERS ON COMMON CENTERS TO BE CONCENTRIC WITHIN T.I.R.<br>6. REMOVE ALL BURRS |                      | PORT SALERNO, FLORIDA            |                 | ENGINEERING DATA DRAWING |                                 |
|     |                  |      |      | DIMENSIONS ARE IN INCHES<br>TOLERANCES                                                                                                                                                                                                               |                      | MATERIAL                         |                 | TITLE                    |                                 |
|     |                  |      |      | DECIMALS<br>.X ± .030<br>.XX ± .015<br>.XXX ± .005                                                                                                                                                                                                   | FRACTIONAL<br>± 1/64 | ANGULAR<br>X° ± 1°<br>X'X' ± 15' | FINISH          | AREA                     | SMA STRAIGHT PLUG<br>CRIMP TYPE |
|     |                  |      |      | DRAWN R.R.A. DATE 12-16-85                                                                                                                                                                                                                           |                      | SCALE                            | CODE IDENT. NO. | SIZE                     | DRAWING NO. SHT. 1 of 2         |
|     |                  |      |      | CHECKED DATE                                                                                                                                                                                                                                         |                      |                                  | 95077           | A                        | M39012/55-3026                  |
|     |                  |      |      | APPROVED RD DATE 2-26-84                                                                                                                                                                                                                             |                      |                                  |                 |                          |                                 |

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S/M DESIGN STANDARDS

DRAWING NO.

M39012/55-3026

| REQUIREMENTS                                                                             | RATINGS          | REQUIREMENTS                                         | RATINGS                                                       |
|------------------------------------------------------------------------------------------|------------------|------------------------------------------------------|---------------------------------------------------------------|
| Nominal Impedance (ohms)                                                                 | 50               | Vibration                                            | MIL-STD-202<br>Method 204<br>Cond. D (20G's)                  |
| Frequency Range (ghz)                                                                    | DC - 12.4        | Shock                                                | MIL-STD-202<br>Method 213<br>Cond. I (100G's)                 |
| Voltage Rating (max. vrms)                                                               | 250              | Temperature<br>Cycling                               | MIL-STD-202<br>Method 107 - Cond. B<br>(-65°C to +200 ° C)    |
| Temperature Rating (degrees centigrade)                                                  | -65° to +165°    | Corrosion                                            | MIL-STD-202<br>Method 101<br>Cond. B (48 Hrs.)                |
| VSWR (max.)                                                                              | 1.15 + .02 xFGHz | Moisture<br>Resistance                               | MIL-STD-202<br>Method 106<br>Less Step 7b                     |
| Insertion Loss (dB max.)                                                                 | .06 x√FGHz       | Barometric Pressure<br>(Altitude)                    | MIL-STD-202<br>Method 105 - Cond. C<br>(70,000 ft) (190 vrms) |
| RF Leakage (min. dB down)                                                                | 60 dB-FGHz       | CAPTIVATION:<br>Center Contact<br>(Min. Axial Force) | 6 lbs.                                                        |
| RF High Potential (max. vrms)                                                            | 500 at 5MHz      |                                                      |                                                               |
| Dielectric Withstanding Voltage (max. vrms)                                              | 750              |                                                      |                                                               |
| Insulation Resistance (min. megohms)                                                     | 5000             |                                                      |                                                               |
| Contact Resistance:<br>Center Contact (max. milliohms)<br>Outer Contact (max. milliohms) | 3.0<br>2.0       |                                                      |                                                               |
| Center Contact Axial Forces:<br>Insertion (max. ounces)<br>Withdrawal (min. ounces)      | N/A              |                                                      |                                                               |
| Connector Durability (min. cycles)                                                       | 500              |                                                      |                                                               |
| Connector Engagement & Disengagement<br>(max. inch lbs.)                                 | 2.0              |                                                      |                                                               |

REMARKS: 1) Recommended Mating Torque: 7 - 10 Inch Pounds.

TITLE:

SMA, CRIMP PLUG

**SOLITRON/MICROWAVE**  
PORT SALERNO, FLORIDA

SHT. 2 of 2

DRAWING NO.

M39012/55-3026

REV.