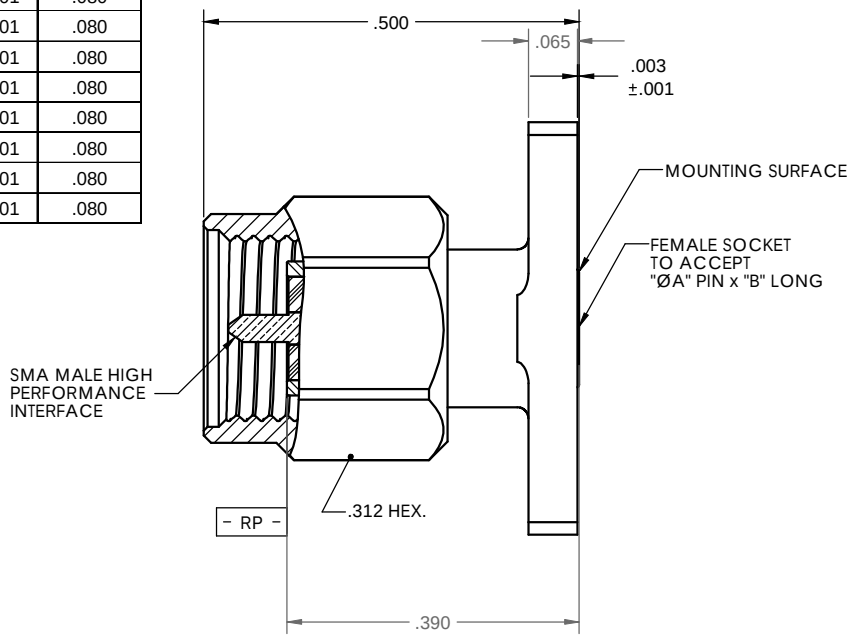
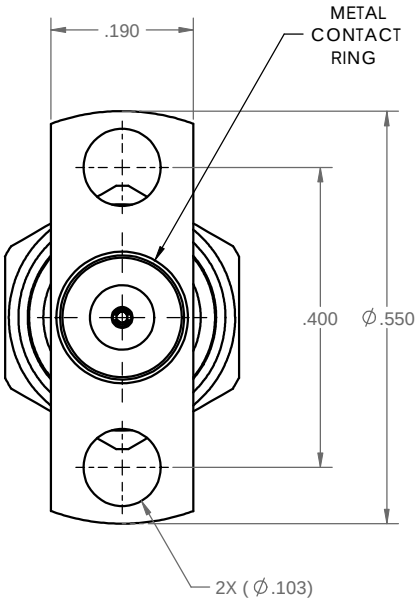
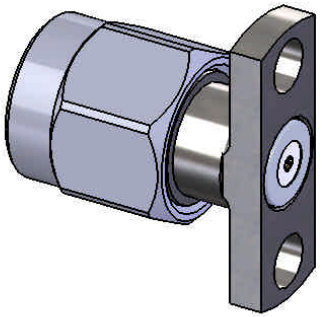
| PART NO. | Ø A | B Max. |
|---|---|---|
| -1CC | .009±.001 | .080 |
| -1CCSF | .009±.001 | .080 |
| -2CC | .012±.001 | .080 |
| -2CCSF | .012±.001 | .080 |
| -3CC | .015±.001 | .080 |
| -3CCSF | .015±.001 | .080 |
| -4CC | .018±.001 | .080 |
| -4CCSF | .018±.001 | .080 |
| -5CC | .020±.001 | .080 |
| -5CCSF | .020±.001 | .080 |

| REVISIONS | | | |
|---|---|---|---|
| REV | DESCRIPTION | DATE | BY |
| - | INITIAL RELEASE | 03.16.10 | YP |
| | | | |
| | | | |



## MATERIAL:

Body, Insert & Coupling Nut:
303 SST per ASTM A-582
Center Conductor:
BeCu Alloy per ASTM B-196
Retaining Ring:
BeCu alloy per ASTM B-196
or ASTM B-197.
Insulator:
PTFE Teflon per ASTM D-1710
Bead:
Ultem 1000 per ASTM 5205
Gasket:
Silicone per A-A-59588

## ELECTRICAL:

Impedance: 50 Ohms Nom.
Freq. Range: DC TO 27 GHz
VSWR: 1.10:1 max to 18 GHz
1.15:1 max 18 to 27 GHz
Insertion Loss: $.035\sqrt{f}$ (GHz) dB max.
Working Voltage: 335 Vrms max @ Sea Level
Dielectric Withstand Voltage: 1000 Vrms min.
RF HiPot Voltage: 670 Vrms min. @ 5MHz
Corona Level: 250 Vrms @ 70,000 ft
Insulation Resistance: 5000 MegaOhms min.
R.F. Leakage: -(100 - fGHz).
Contact Resistance:
Center Conductor:
Before Environmental: 6.0 Milliohms
After Environmental: 8.0 Milliohms
Outer Contact:
Before 2.0 MiliOhms

## MECHANICAL:

Mating Characteristics:
SMA high performance
Force To Engage:
Torque: 2 inch-pounds max.
Connector Durability:
500 cycles min @ 12 cycles/minute max.
Permeability: Less than 2.0 mu
Center Contact Captivation:
Axial Force from Interface: 6 pounds min.
Rotational Captivation:
Torque: 4 inch-ounces min.
Coupling Proof Torque: 15 inch-pounds min.
Coupling Mech. Retention: 60 pounds min.

## ENVIRONMENTAL:

Temp. Range: -65°C to +165°C
Thermal Shock:
MIL-STD-202, Method 107, Test Cond. B
Moisture Resistance:
MIL-STD-202, Method 106. Insulation resistance at least 200 MegaOhms within 5 minutes after removal from humidity
Corrosion:
MIL-STD-202, Method 101, Test Cond. B
Vibration:
MIL-STD-202, Method 204, Test Cond. D
Shock:
MIL-STD-202, Method 213, Test Cond. I

## FINISH:

Body, Insert & Coupling Nut (for CCSF):
Passivate per ASTM A-967.
Body, Insert & Coupling Nut (for CC):
Goldplate per ASTM B-488, over nickel under plate per SAE AMS-QQ-N-290.
Center Conductor
Goldplate per ASTM B-488, over nickel under plate per SAE AMS-QQ-N-290.

**APPLICABLE CARLISLE IT DOCUMENTS**

| WORK STANDARD | PROD INSTRUC | ASSY INSTRUC |
|---|---|---|
| NA | NA | NA |
| | | |
| | | |


NOTICE
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**TOLERANCES AND NOTES**
EXCEPT AS NOTED
DIMENSIONS ARE IN INCHES.
XX ±.015
LINEAR .XXX ±.005 ANGULAR ± 1/2°
FRACTION ± 1/32
1. MACHINE FINISH: 63 RMS
2. BREAK ALL SHARP EDGES .003 MAX.
3. MACHINED FILLETS .005 MAX.
4. MACHINED SURFACES SQUARE TO RESPECTIVE AXIS WITHIN .005 INCHES PER INCH.
5. MACHINED DIAMETERS CONCENTRIC WITHIN .002 T.I.R.
6. DIMENSIONS TO BE MET BEFORE PLATING.
7. CHAMFER ALL THREADS 45°.
8. THREADS PER H-28
9. REMOVE FRAYED EDGES ON TEFLON.
10. REMOVE ALL BURRS.

| MATERIAL | | |
|---|---|---|
| APPROVAL | INITIALS | DATE |
| DRAWN BY | YPHAN | 03.16.10 |
| CHECKED BY | - | - |
| TEST ENGR | | |
| QUALITY | | |
| DESIGN ENGR | HT | 12.13.10 |
| MFG. ENGR | | |

| - | - | - | - |
|---|---|---|---|
| MATERIAL | SIZE | SPECIFICATION | PROCUREMENT |

CARLISLE Interconnect Technologies
Long Beach, CA 90815

TITLE
**SMA MALE, HIGH PERFORMANCE 2 HOLE FLANGE MOUNT (.190 X .550), FIELD REPLACEABLE**

| SCALE | SUB-DIRECTORY\FILE NAME | SHEET 1 OF 1 |
|---|---|---|
| 8:1 | _OL/ | |

| SIZE | CAGE CODE | DRAWING NO. | REV. |
|---|---|---|---|
| C | 30990 | H5770 | - |

ENG-DWG REV. C