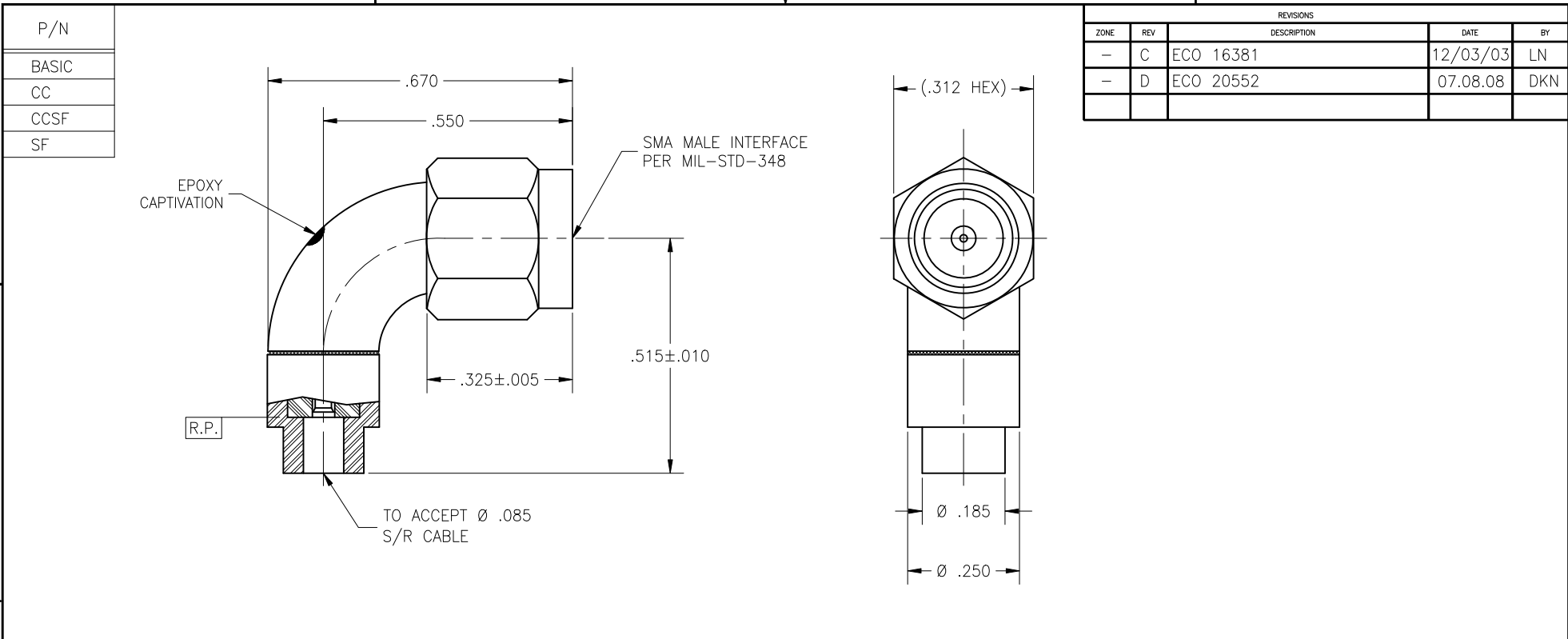


4

3

2

1



REVISIONS				
ZONE	REV	DESCRIPTION	DATE	BY
-	C	ECO 16381	12/03/03	LN
-	D	ECO 20552	07.08.08	DKN

**MATERIAL(S):**

Body Sub-Assy:  
303 sst per ASTM A-582 and  
304 sst per SAE-AMS-5567.  
Coupling Nut:  
303 sst per ASTM A-582.  
Center Conductor:  
BeCu alloy per ASTM B-196.  
Retaining Ring:  
BeCu alloy per ASTM B-196  
Dielectric:  
PTFE per ASTM D-1710.  
Gasket:  
Silicone rubber per A-A-59588.  
Epoxy: (for CC & CCSF)  
Sigma VF type HV.

**ELECTRICAL(S):**

Impedance: 50 Ohms nominal.  
Frequency Range: DC to 18.0 GHz.  
VSWR:  $1.07 + .005 \times f(\text{GHz})$  max.  
Insertion Loss:  $.03 \sqrt{f(\text{GHz})}$  dB max  
Working Voltage: 335 Vrms max @ sea level.  
Dielectric Withstanding Voltage: 1000 Vrms min.  
R.F. HiPot Voltage: 670 Vrms min @ 5MHz.  
Corona Level: 250 Vrms @ 70,000 ft.  
Insulation Resistance: 5000 MegOhms min.  
R.F. Leakage:  $-(60 - f\text{GHz})$  dB min for CC & CCSF  
 $-(90 - f\text{GHz})$  dB min for BASIC & SF  
Contact Resistance:  
Initial:  
Center Contact: 3.0 Milliohm max.  
Outer Contact: 2.0 Milliohm max.  
After Environment:  
Center Contact: 4.0 Milliohm max.  
Outer Contact: NA.

**MECHANICAL(S):**

Mating Characteristics:  
Interface per Mil-Std-348.  
Force To Engage & Disengage:  
Torque: 2 inch-pounds max.  
Longitudinal Force: NA.  
Connector Durability:  
500 cycles min @ 12 cycles/minute max.  
Permeability: Less than 2.0 mu.  
Center Contact Captivation: (for CC & CCSF)  
Axial Force: 6 pounds min.  
Torque: 4 inch-ounces min.  
Coupling Torque: 15 inch-pounds min.  
Coupling Mech. Retention: 60 pounds min.

**ENVIRONMENTAL(S):**

Temperature Range:  $-65^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .  
Thermal Shock:  
Mil-Std-202, Method 107, Test Cond. A.  
Moisture Resistance:  
Mil-Std-202, Method 106, Insulation  
resistance at least 200 MegOhms within  
5 minutes after removal from humidity.  
Corrosion:  
Mil-Std-202, Method 101, Test Cond. B.  
Vibration:  
Mil-Std-202, Method 204, Test Cond. B.  
Shock:  
Mil-Std-202, Method 213, Test Cond. I.

**FINISH(ES):**

Coupling Nut:  
(For SF & CCSF): Passivate per ASTM A-967.  
(For BASIC & CC): Gold plate per ASTM B-488, over nickel under plate per AMS-QQ-N-290.  
Body & Center Conductor:  
Gold plate per ASTM B-488, over nickel under plate per AMS-QQ-N-290.

**APPLICABLE TENSOLITE DOCUMENTS**

WORK STD	PROD INST	ASSY INST
NA	NA	NA

**NOTICE**

THIS DRAWING EMBODIES A CONFIDENTIAL PROPRIETARY DESIGN ORIGINATED BY TENSOLITE COMPANY AND ALL DESIGN, MANUFACTURING REPRODUCTION, USE AND SALE RIGHTS REGARDING THE SAME ARE EXPRESSLY RESERVED. IT IS SUBMITTED UNDER A CONFIDENTIAL RELATIONSHIP FOR A SPECIFIED PURPOSE AND THE RECIPIENT AGREES BY ACCEPTING THIS DRAWING NOT TO SUPPLY OR DISCLOSE ANY INFORMATION REGARDING IT TO ANY UNAUTHORIZED PERSON TO INCORPORATE IN OTHER PROJECTS ANY SPECIAL FEATURES RECLAM TO THIS DESIGN. ALL PATENT RIGHTS HERETO ARE EXPRESSLY RESERVED BY TENSOLITE COMPANY, LONG BEACH, CALIFORNIA 90815.

**TOLERANCES AND NOTES EXCEPT AS NOTED**

- DIMENSIONS ARE IN INCHES  
LINEAR .XX ±.015 ANGULAR ± 1/2°  
FRACTION ± 1/32
- MACHINE FINISH:  $\sqrt{63}$  RMS
  - BREAK ALL SHARP EDGES .003 MAX.
  - MACHINED FILLETS: .005 MAX.
  - MACHINED SURFACES SQUARE TO RESPECTIVE AXIS WITHIN .005 INCHES PER INCH.
  - MACHINED DIAMETERS CONCENTRIC WITHIN .002 T.I.R.
  - DIMENSIONS TO BE MET BEFORE PLATING.
  - CHAMFER ALL THREADS 45°.
  - THREADS PER H-28
  - REMOVE FRAVED EDGES ON TEFLON.
  - REMOVE ALL BURRS.

MATERIAL		SIZE	SPECIFICATION	PROCUREMENT
APPROVAL INITIALS	DATE	Tensolite HIGH PERFORMANCE CABLES & INTERCONNECT SYSTEMS Long Beach, California 90815		
DRAWN BY HL	01.30.79	TITLE SMA MALE RADIUS R/A TO Ø .085 SEMI-RIGID CABLE		
CHECKED BY PM	07.09.08	SCALE 6:1	SUB-DIRECTORY/FILENAME OL_\	SHEET 1 of 1
TEST ENGG		SIZE C	CAGE CODE 30990	DRAWING NO. 5236-2
QUALITY		DESIGN ENGG PMAO	07.09.08	REV. D
MFG ENGG				

4

3

2

1