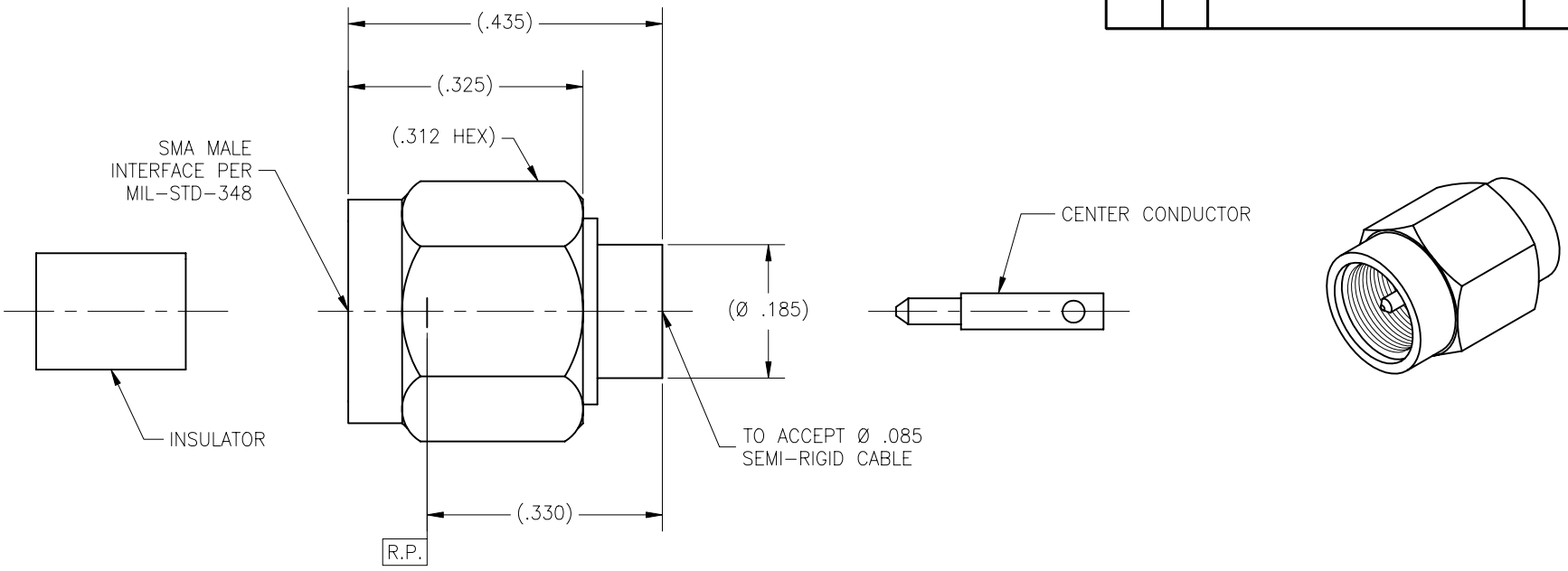
P/N
BASIC
SF

REVISIONS				
ZONE	REV.	DESCRIPTION(S)	DATE	BY
–	B	ECO 14394	04.15.02	ATV
–	C	ECO 19630	10.04.06	DKN



DRAWING NO.	REV.
5285–2	C

NOTE:

CENTER CONDUCTOR & INSULATOR TO BE PACKAGED AND SHIPPED UNASSEMBLED.

MATERIAL:

Body & Coupling Nut:
303 sst per ASTM A–582.
Center Conductor:
Brass Alloy C360 per ASTM B–16.
Retaining Ring:
BeCu alloy per ASTM B–197.
Gasket:
Silicone Rubber per A–A–59588
Insulator:
PTFE per ASTM D–1710.

ELECTRICAL:

Impedance: 50 Ohms nominal.
Freqancy Range: DC to 18.0 GHz.
VSWR: 1.05 + .005f(GHz).
Insertion Loss: $.03\sqrt{f(GHz)}$.
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: –(90 – fGHz) dB.
Contact Resistance:
Initial:
Center Contact: 2.0 Milliohm max.
Outer Contact: 2.0 Milliohm max.
After Environment:
Center Contact: 3.0 Milliohm max.
Outer Contact: NA.

MECHANICAL:

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.
Coupling Proof Torque: 15 inch–pounds min.
Coupling Mech. Retention: 60 pounds min.

ENVIRONMENTAL:

Temperature Range: –65° to +125°.
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. D.
Shock:
Mil–Std–202, Method 213, Test Cond. I.

FINISH:

Coupling Nut:
(for SF): Passivated per ASTM A–967.
(for BASIC): 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

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TOLERANCES AND NOTES
EXCEPT AS NOTED

DIMENSIONS ARE IN INCHES.
LINEAR .XX ±.015 .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.

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MATERIAL	SIZE	SPECIFICATION	PROCUREMENT
NEXT ASSY			

APPROVAL INITIALS		DATE
DRAWN BY	IMG	03.12.02
CHECKED		
QUALITY		
ENGINEERING	DNg	12.01.06

Tensolite
HIGH PERFORMANCE CABLES & INTERCONNECT SYSTEMS
Long Beach, California 90815

TITLE: SMA MALE STRAIGHT TO Ø .085 SEMI–RIGID CALBE (W/ CONTACT)

SCALE	SUB–DIRECTORY\FILENAME	SHEET
10/1	OL_\	1 OF 1

SIZE	CAGE CODE	DRAWING NO.	REV.
C	30990	5285–2	C