P/N	CABLE TYPE(S)	FIGURE(S)
−1CC	RG178	1
−2CC	RG316	
−3CC	RD178	
−4CC	RD316	
−9CC	TLL18−1087	
−5CC THRU −10CC: OBSOLETED		

REVISIONS			
REV	DESCRIPTION	DATE	BY
J	ECO 21401	06.26.08	P.MAO
K	ECO 26099 (OBSOLETE −5 THRU −8 & −10CC)	08.21.12	DKN

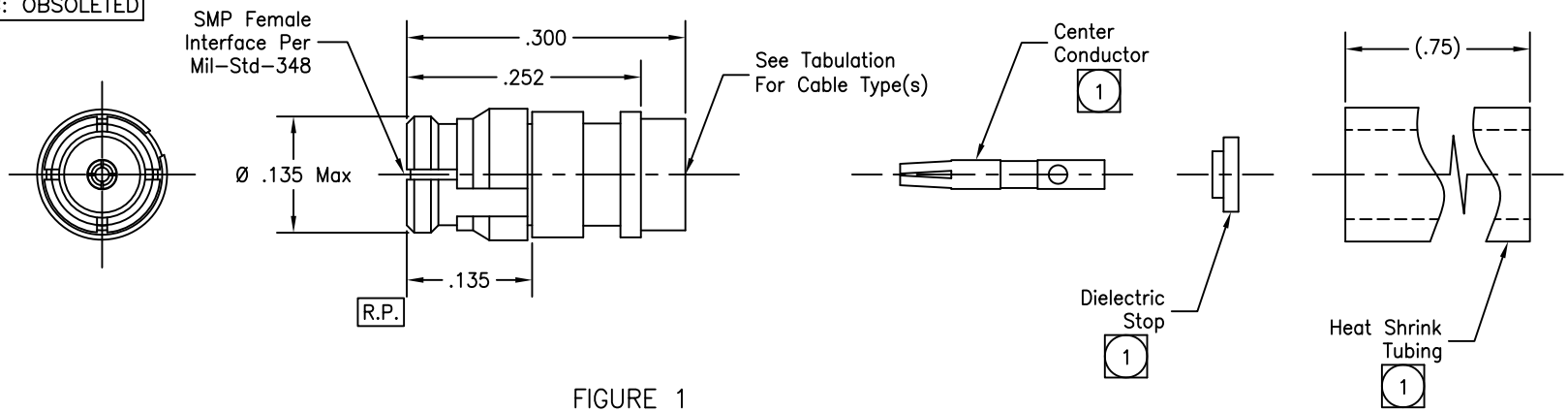

FIGURE 1

Note(s):

1. Center conductor, dielectric stop and heat shrink tubing to be packaged and shipped unassembled.

MATERIAL(S):

Body & Center Conductor:
BeCu alloy per ASTM B−196.
EMI & Anti−Rock Ring:
BeCu alloy per ASTM B−196.
Dielectric:
PTFE per ASTM D−1710.
Dielectric Stop:
Polyetherekeytone (PEEK) or Torlon.

Heat Shrink Tubing:
Per SAE AMS−DTL−23053/4

ELECTRICAL:

Impedance: 50 Ohms nominal.
Frequency Range: DC to 40.0 GHz.**
VSWR: 1.20:1 max to 18.0 GHz.
1.35:1 max to 26.5 GHz.**
1.50:1 max to 40.0 GHz.**
Insertion Loss: 0.05 $\sqrt{f(GHz)}$ dB max.
Working Voltage: 335 Vrms max @ sea level.
Dielectric Withstanding Voltage: 500 Vrms min.
R.F. HiPot Voltage: 325 Vrms min @ 5MHz.
Corona Level: 190 Vrms @ 70,000 ft.
Insulation Resistance: 5,000 MegOhms min.
Contact Resistance:
Center Contact: 6.0 Milliohm max.
Outer Contact: 2.0 Milliohm max.
R.F. Leakage: −80 dB max to 3.0 GHz.
−65 dB max to 26.5 GHz.

MECHANICAL:

Mating Characteristics:
Interface per Mil−Std−348.
Force To Engage:
Full Detent: 15 lbs max
Limited Detent: 10 lbs max
Smooth Bore: 2 lbs max
Force To Disengage:
Full Detent: 5 lbs min
Limited Detent: 2 lbs min
Smooth Bore: .5 lbs min
Center Contact Retention:
Axial Force: 1.5 pounds min.
Radial Torque: NA
Connector Durability:
Full Detent: 100 cycles
Limited Detent: 500 cycles
Smooth Bore: 1,000 cycles

ENVIRONMENTAL:

Temperature Range: −65°C to +165°C.
Thermal Shock:
Mil−Std−202, Method 107, Test Cond. B, except high temperature to be +165°C or maximum high temperature of cable.
Moisture Resistance:
Mil−Std−202, Method 106, except step 7b shall be omitted. Insulation resistance at least 1,000 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(ES):

Body & Center Conductor:
Gold plate per ASTM B−488, Type II, Code C or D, Class 1.25 over nickel under plated per SAE AMS−QQ−N−290, Class 1.

EMI & Anti−Rock Ring:
Gold plate per ASTM B−488, Type II, Code C, Class 0.25 over nickel under plated per SAE AMS−QQ−N−290, Class 1.

APPLICABLE CARLISLE IT DOCUMENTS

WORK STD	PROD INST	ASSY INST
NA	NA	NA

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.

MATERIAL		
APPROVAL INITIALS		DATE
DRAWN BY	BRD	01.31.96
CHECKED BY	DNG	08.30.12
TEST ENGG		
QUALITY		
DESIGN ENGG	P.MAO	07.15.08
MFG ENGG		
ECO APPRV	PCV	08.22.12

SPECIFICATION: −
PROCUREMENT: −

CARLISLE Interconnect Technologies
Cerritos, CA 90703

TITLE: SMP FEMALE STRAIGHT TO FLEXIBLE CABLE

SCALE	DIRECTORY\SUB−DIRECTORY	SHEET
10:1	OUTLINE\OL_\	1 OF 1

SIZE	CAGE CODE	DRAWING NO.	REV.
C	30990	P657	K

ENG−DWG REV. E