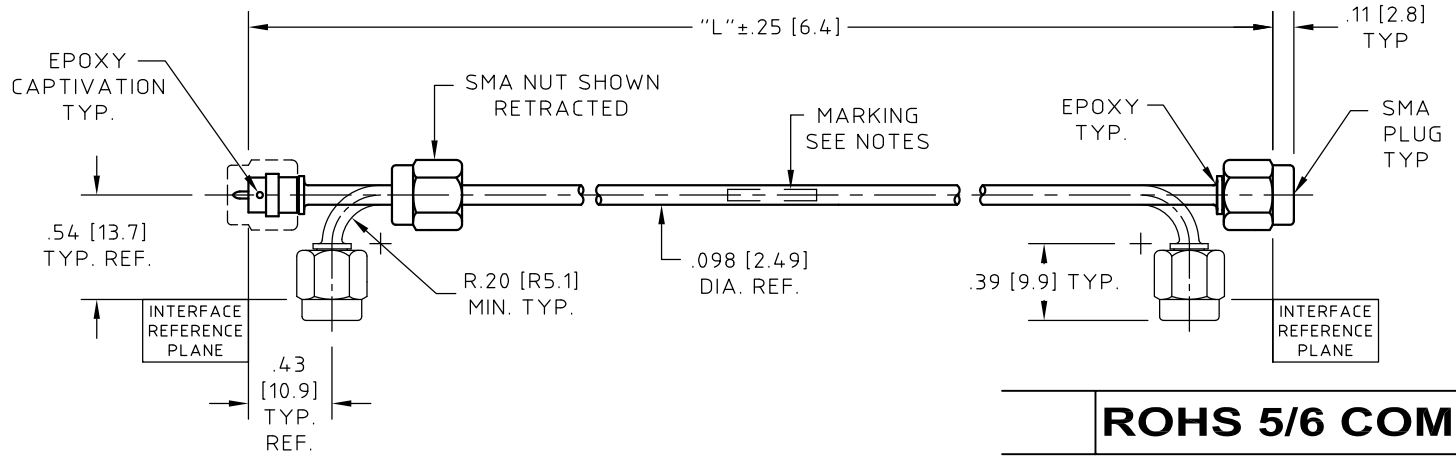
CONTROL DRAWING

minibend E-XX

Q



ROHS 5/6 COMPLIANT

NOTES:

1. DESCRIPTION,
   CABLE ASSEMBLY, LOW OUTGASSING, SMA PLUG TO SMA PLUG MEETS OR EXCEEDS NASA LOW OUTGASSING REQUIREMENTS.
   CABLE ASSEMBLY IS FULLY CAPTIVATED, RUGGEDIZED AND SUITABLE FOR COMPLEX, CONGESTED NSTALLATIONS.
   WHEN INSTALLED AND BEND AT THE MINIMUM BEND RADIUS, CABLE ASSEMBLY WILL TOLERATE MULTIPLE ±90° ROTATIONS AT THE CABLE CONNECTOR JUNCTION.

2. CABLE,
   COAXIAL CABLE HUBER+SUHNER Astrolab P/N 32081E MEETS OR EXCEEDS MIL-DTL-17.
   SEE HUBER+SUHNER Astrolab CONTROL DRAWING FOR MATERIALS AND FINISHES.

3. CONNECTOR -A-, SMA PLUG:
   HUBER+SUHNER Astrolab P/N 29094CE-32-81
   INTERFACE DIMENSIONS IAW MIL-STD-348.
   SEE HUBER+SUHNER Astrolab CONTROL DRAWING FOR MATERIALS AND FINISHES.

4. CONNECTOR -B-, SMA PLUG:
   SAME AS CONNECTOR -A-.

5. MARKING:
   MARKING APPROXIMATELY CENTERED, DIRECTLY ON CABLE AS FOLLOWS:
   MINIBEND E-xx YYWW
   WHERE xx DENOTES THE LENGTH OF THE CABLE ASSEMBLY AND YYWW THE DATE CODE FOR DATE OF MANUFACTURE.
   NO MARKING ON CABLE ASSEMBLIES SHORTER THAN 3.00 [76.2].
   MARKING ON PACKAGING ONLY.
   WHEN SERIAL NUMBERS ARE REQUESTED AND ISSUED, CABLE ASSEMBLIES WILL BEAR THEIR S/N ON A LOOSE FITTING, CAPTIVATED MARKER SLEEVE.

NOTES CONTINUED:

6. ELECTRICAL CHARACTERISTICS:
   IMPEDANCE,
   50.0 Ohms NOMINAL.
   FREQUENCY, INSERTION LOSS AND VSWR SEE CHART.

7. MECHANICAL:
   OPERATING TEMPERATURE RANGE,
   -55° C TO +125°C.
   PULL STRENGTH TO 25.0 LBS. [111.2 N].
   EPOXY CAPTIVATED CONTACT WILL SHIFT NO MORE THAN .005 [0.13] UNDER THE FOLLOWING FORCES:
   5.0 LBS. [22.3 N] MAX. UNCABLED, IN BOTH DIRECTIONS.
   10.0 LBS. [44.5 N] MAX. CABLED, IN PUSH DIRECTION.

8. ATTENUATION FORMULAS:
8A. CALCULATE AT 12.0 GHz
   (dB) = .97 dB/FT. X L(ft.)+.21 dB
8B. CALCULATE AT 18.0 GHz
   (dB) = 1.20 dB/FT. X L(ft.)+.27 dB

HUBER+SUHNER Astrolab PART NUMBER	DIMENSION "L"	2.0 GHz		12.4 GHz		18.0 GHz	
		VSWR	I.L. dB	VSWR	I.L. dB	VSWR	I.L. dB
minibend E-2.5	2.50 [63.5]	1.25:1	0.19	1.35:1	0.39	1.45:1	0.55
minibend E-3	3.00 [76.2]	1.25:1	0.20	1.35:1	0.43	1.45:1	0.60
minibend E-3.5	3.50 [88.9]	1.25:1	0.22	1.35:1	0.47	1.45:1	0.65
minibend E-4	4.00 [101.6]	1.25:1	0.24	1.35:1	0.51	1.45:1	0.70
minibend E-4.5	4.50 [114.3]	1.25:1	0.25	1.35:1	0.57	1.45:1	0.75
minibend E-5	5.00 [127.0]	1.25:1	0.27	1.35:1	0.60	1.45:1	0.80
minibend E-5.5	5.50 [139.7]	1.25:1	0.28	1.35:1	0.65	1.45:1	0.85
minibend E-6	6.00 [152.4]	1.25:1	0.30	1.35:1	0.68	1.45:1	0.90
minibend E-7	7.00 [177.8]	1.25:1	0.33	1.35:1	0.77	1.45:1	1.00
minibend E-8	8.00 [203.2]	1.25:1	0.36	1.35:1	0.85	1.45:1	1.10
minibend E-9	9.00 [228.6]	1.25:1	0.39	1.35:1	0.94	1.45:1	1.20
minibend E-10	10.00 [254.0]	1.25:1	0.42	1.35:1	1.01	1.45:1	1.29
minibend E-11	11.00 [279.4]	1.25:1	0.45	1.35:1	1.10	1.45:1	1.39
minibend E-12	12.00 [304.8]	1.25:1	0.48	1.35:1	1.18	1.45:1	1.47
minibend E-13	13.00 [330.2]	1.25:1	0.51	1.35:1	1.26	1.45:1	1.58
minibend E-14	14.00 [355.6]	1.25:1	0.54	1.35:1	1.33	1.45:1	1.67
minibend E-15	15.00 [381.0]	1.25:1	0.58	1.35:1	1.43	1.45:1	1.78
minibend E-16	16.00 [406.4]	1.25:1	0.61	1.35:1	1.50	1.45:1	1.87
minibend E-		1.25:1		1.35:1		1.45:1	

SEE NOTE 8

NAME		DATE
PREP.	E.H.	04/27/00
ELEC.	R. F.	04/27/00
MECH.	D.P.D	04/27/00
Q.C.		

HUBER+SUHNER Astrolab

UNLESS OTHERWISE SPECIFIED CONCENTRICITY .004 T.I.R. CORNERS AND FILLETS .005 MAX. RADIUS OR CHAMFER. SURFACE FINISH 63 RMS MICROINCHES OR BETTER.

FRACTIONS	± 1/16
X	± .030
XX	± .015
XXX	± .005
ANGLES	± 1°

DO NOT SCALE DRAWING

TITLE

CABLE ASSEMBLY, CAPTIVATED, SMA PLUG TO SMA PLUG, RUGGEDIZED

THDS. TO BE IN ACCORD WITH U.S. DEPT. OF COMM. SCREW THD. STDS. FOR FEDERAL SERVICES 1950 SUPL. TO HANDBOOK H 28.

SCALE	CODE IDENT.	DWG NO.	REV
1:1	16301	minibend E-XX	Q

REV.	DESCRIPTION	DATE	BY	APPROVED
Q	ECN No. 15765	08/23/13	GSG	