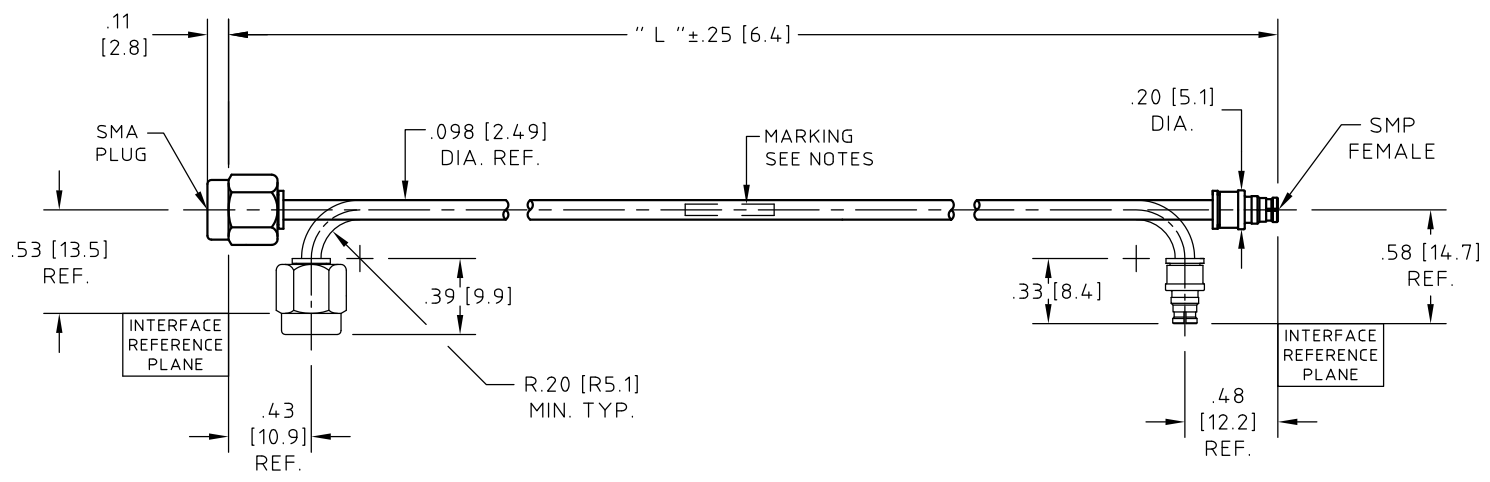


# CONTROL DRAWING

minibend S-XX



HUBER+SUHNER Astrolab PART NUMBER	DIMENSION "L"	2.0 GHz		12.4 GHz		20.0 GHz	
		VSWR	IL, dB	VSWR	IL, dB	VSWR	IL, dB
minibend S-2.5	2.50 [63.5]	1.25:1	0.20	1.30:1	0.40	1.45:1	0.68
minibend S-3	3.00 [76.2]	1.25:1	0.21	1.30:1	0.44	1.45:1	0.73
minibend S-3.5	3.50 [88.9]	1.25:1	0.23	1.30:1	0.48	1.45:1	0.78
minibend S-4	4.00 [101.6]	1.25:1	0.25	1.30:1	0.52	1.45:1	0.84
minibend S-4.5	4.50 [114.3]	1.25:1	0.26	1.30:1	0.58	1.45:1	0.89
minibend S-5	5.00 [127.0]	1.25:1	0.28	1.30:1	0.61	1.45:1	0.94
minibend S-5.5	5.50 [139.7]	1.25:1	0.29	1.30:1	0.66	1.45:1	0.99
minibend S-6	6.00 [152.4]	1.25:1	0.31	1.30:1	0.69	1.45:1	1.05
minibend S-6.5	6.50 [165.1]	1.25:1	0.32	1.30:1	0.74	1.45:1	1.10
minibend S-7	7.00 [177.8]	1.25:1	0.34	1.30:1	0.78	1.45:1	1.15
minibend S-8	8.00 [203.2]	1.25:1	0.37	1.30:1	0.86	1.45:1	1.25
minibend S-9	9.00 [228.6]	1.25:1	0.40	1.30:1	0.95	1.45:1	1.36
minibend S-10	10.00 [254.0]	1.25:1	0.43	1.30:1	1.02	1.45:1	1.46
minibend S-11	11.00 [279.4]	1.25:1	0.46	1.30:1	1.11	1.45:1	1.57
minibend S-12	12.00 [304.8]	1.25:1	0.49	1.30:1	1.19	1.45:1	1.67
minibend S-13	13.00 [330.2]	1.25:1	0.52	1.30:1	1.27	1.45:1	1.77
minibend S-14	14.00 [355.6]	1.25:1	0.55	1.30:1	1.34	1.45:1	1.88
minibend S-15	15.00 [381.0]	1.25:1	0.59	1.30:1	1.44	1.45:1	1.98
minibend S-16	16.00 [406.4]	1.25:1	0.62	1.30:1	1.51	1.45:1	2.09
minibend S-17	17.00 [431.8]	1.25:1	0.65	1.30:1	1.60	1.45:1	2.19
minibend S-18	18.00 [457.2]	1.25:1	0.68	1.30:1	1.69	1.45:1	2.30
minibend S-		1.25:1		1.30:1		1.45:1	

NOTES:

- DESCRIPTION,  
CABLE ASSEMBLY, SMA PLUG  
TO SMP FEMALE.
- CABLE,  
COAXIAL CABLE HUBER+SUHNER Astrolab P/N 32081  
MEETS OR EXCEEDS MIL-DTL-17.  
SEE HUBER+SUHNER Astrolab CONTROL DRAWING  
FOR MATERIALS AND FINISHES.
- CONNECTOR -A-, SMA PLUG:  
HUBER+SUHNER Astrolab P/N 29094C-32-81  
INTERFACE DIMENSIONS IAW MIL-STD-348.  
SEE HUBER+SUHNER Astrolab CONTROL DRAWING  
FOR MATERIALS AND FINISHES.
- CONNECTOR -B-, SMP FEMALE:  
HUBER+SUHNER ASTROLAB P/N 29473C-32-81-1  
INTERFACE DIMENSIONS IAW MIL-STD-348.  
SEE HUBER+SUHNER Astrolab CONTROL DRAWING  
FOR MATERIALS AND FINISHES.

NOTES CONTINUED:

- MARKING:  
MARKING APPROXIMATELY CENTERED DIRECTLY  
ON CABLE AS FOLLOWS:  
**MINIBEND S-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.
- ELECTRICAL CHARACTERISTICS:  
IMPEDANCE,  
50.0 Ohms NOMINAL.  
FREQUENCY, INSERTION LOSS AND VSWR  
SEE CHART.
- MECHANICAL:  
OPERATING TEMPERATURE RANGE,  
-55° C TO +125° C.  
PULL STRENGTH TO 15.0 LBS [66.7 N].
- ATTENUATION FORMULAS:  
8A. CALCULATE AT 12.4 GHz  
(dB) = .97 dB/FT. X L(ft.)+.23 dB  
8B. CALCULATE AT 20.0 GHz  
(dB) = 1.25 dB/FT. X L(ft.)+.42 dB

**ROHS 5/6 COMPLIANT**

SEE NOTE 8

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	

NAME	DATE
PREP. E. HAGELIN	10/01/99
ELEC. R. FUKS	10/01/99
MECH. D.P. DURETT	10/01/99
Q.C.	



THIS DRAWING CONTAINS PATENTABLE AND PROPRIETARY INFORMATION. THE DESIGN CANNOT BE USED WITHOUT WRITTEN PERMISSION OF HUBER + SUHNER ASTROLAB.

TITLE  
**CABLE ASSEMBLY, minibend TYPE, SMA PLUG TO SMP FEMALE**

W	ECN No. 15507	04/22/13	EB									
REV.	DESCRIPTION	DATE	BY	APPROVED								
						THDS. TO BE IN ACCORD WITH U.S. DEPT. OF COMM. SCREW THD. STDS. FOR FEDERAL SERVICES 1950 SUPL. TO HANDBOOK H 28.	SCALE 1:1	CODE IDENT. 16301	DWG NO. minibend S-XX	REV W		