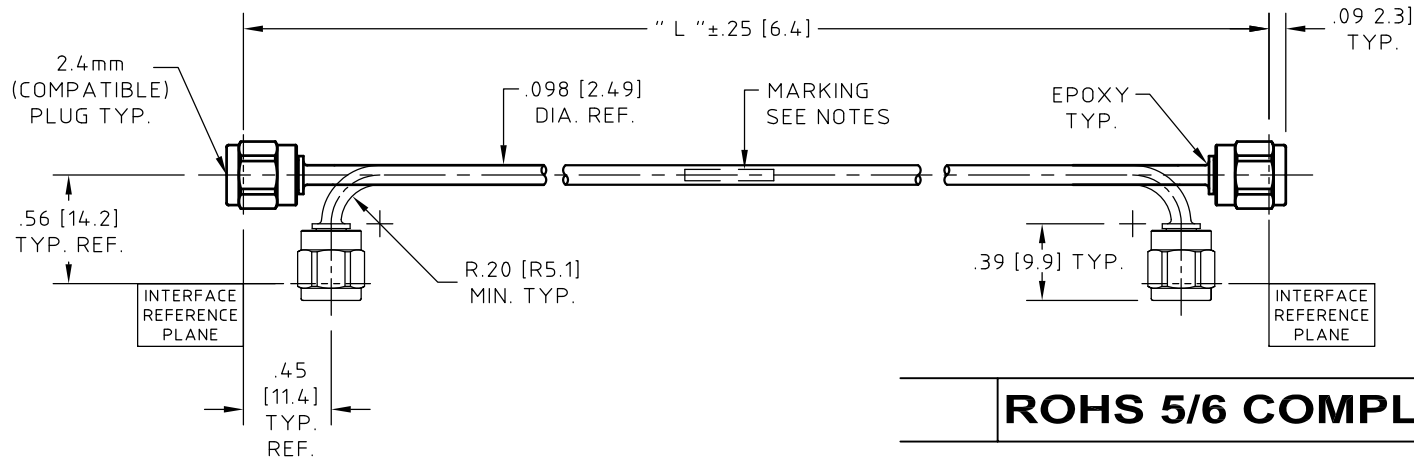


# CONTROL DRAWING

minibend QG-XX

D



**ROHS 5/6 COMPLIANT**

**NOTES:**

- DESCRIPTION,**  
CABLE ASSEMBLY, 2.4mm (COMPATIBLE) PLUG TO 2.4mm (COMPATIBLE) PLUG, RUGGEDIZED AND SUITABLE FOR COMPLEX, CONGESTED INSTALLATIONS.  
WHEN INSTALLED AND BEND AT THE MINIMUM BEND RADIUS, CABLE ASSEMBLY WILL TOLERATE MULTIPLE ±90° ROTATIONS AT THE CABLE CONNECTOR JUNCTION.
- 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.
- CONNECTOR -A-, 2.4mm (COMPATIBLE) PLUG:**  
HUBER+SUHNER Astrolab P/N 29898CR-32-81  
INTERFACE DIMENSIONS IAW MIL-STD-348.  
SEE HUBER+SUHNER Astrolab CONTROL DRAWING FOR MATERIALS AND FINISHES.
- CONNECTOR -B-, 2.4mm (COMPATIBLE) PLUG:**  
SAME AS CONNECTOR -A-.

**NOTES CONTINUED:**

- MARKING:**  
MARKING APPROXIMATELY CENTERED DIRECTLY ON CABLE AS FOLLOWS:  
**MINIBEND QG-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 25.0 LBS. [111.2 N].
- ATTENUATION FORMULAS:**  
8A. CALCULATE AT 26.5 GHz  
(dB) = 1.46 dB/FT. X L(ft.)+.32 dB  
8B. CALCULATE AT 50 GHz  
(dB) = 2.10 dB/FT. X L(ft.)+.55 dB

HUBER+SUHNER Astrolab PART NUMBER	DIMENSION "L"	2.0 GHz		26.5 GHz		50.0 GHz	
		VSWR	I.L. dB	VSWR	I.L. dB	VSWR	I.L. dB
minibend QG-2.5	2.50 [63.5]	1.20:1	0.19	1.45:1	0.62	1.55:1	0.99
minibend QG-3	3.00 [76.2]	1.20:1	0.20	1.45:1	0.68	1.55:1	1.08
minibend QG-3.5	3.50 [88.9]	1.20:1	0.22	1.45:1	0.74	1.55:1	1.16
minibend QG-4	4.00 [101.6]	1.20:1	0.23	1.45:1	0.80	1.55:1	1.25
minibend QG-4.5	4.50 [114.3]	1.20:1	0.25	1.45:1	0.86	1.55:1	1.34
minibend QG-5	5.00 [127.0]	1.20:1	0.26	1.45:1	0.92	1.55:1	1.43
minibend QG-5.5	5.50 [139.7]	1.20:1	0.28	1.45:1	0.98	1.55:1	1.51
minibend QG-6	6.00 [152.4]	1.20:1	0.30	1.45:1	1.05	1.55:1	1.60
minibend QG-6.5	6.50 [165.1]	1.20:1	0.31	1.45:1	1.11	1.55:1	1.69
minibend QG-7	7.00 [177.8]	1.20:1	0.33	1.45:1	1.17	1.55:1	1.78
minibend QG-7.5	7.50 [190.5]	1.20:1	0.34	1.45:1	1.23	1.55:1	1.86
minibend QG-8	8.00 [203.2]	1.20:1	0.36	1.45:1	1.29	1.55:1	1.95
minibend QG-9	9.00 [228.6]	1.20:1	0.39	1.45:1	1.41	1.55:1	2.13
minibend QG-10	10.00 [254.0]	1.20:1	0.42	1.45:1	1.54	1.55:1	2.30
minibend QG-11	11.00 [279.4]	1.20:1	0.45	1.45:1	1.66	1.55:1	2.48
minibend QG-12	12.00 [304.8]	1.20:1	0.48	1.45:1	1.78	1.55:1	2.65
minibend QG-		1.20:1		1.45:1		1.55:1	

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. GSG	11/08/05
ELEC. RF	11/09/05
MECH. AW	12/30/05
Q.C.	

**HUBER+SUHNER**  
**Astrolab**

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

TITLE <b>CABLE ASSEMBLY, 2.4mm (COMPATIBLE) PLUG TO 2.4mm (COMPATIBLE) PLUG, RUGGEDIZED</b>		SCALE 1:1	CODE IDENT. 16301	DWG NO. minibend QG-XX	REV D
THDS. TO BE IN ACCORD WITH U.S. DEPT. OF COMM. SCREW THD. STDS. FOR FEDERAL SERVICES 1950 SUPL. TO HANDBOOK H 28.					

D	ECN No. 15507	04/22/13	EB	
REV.	DESCRIPTION	DATE	BY	APPROVED