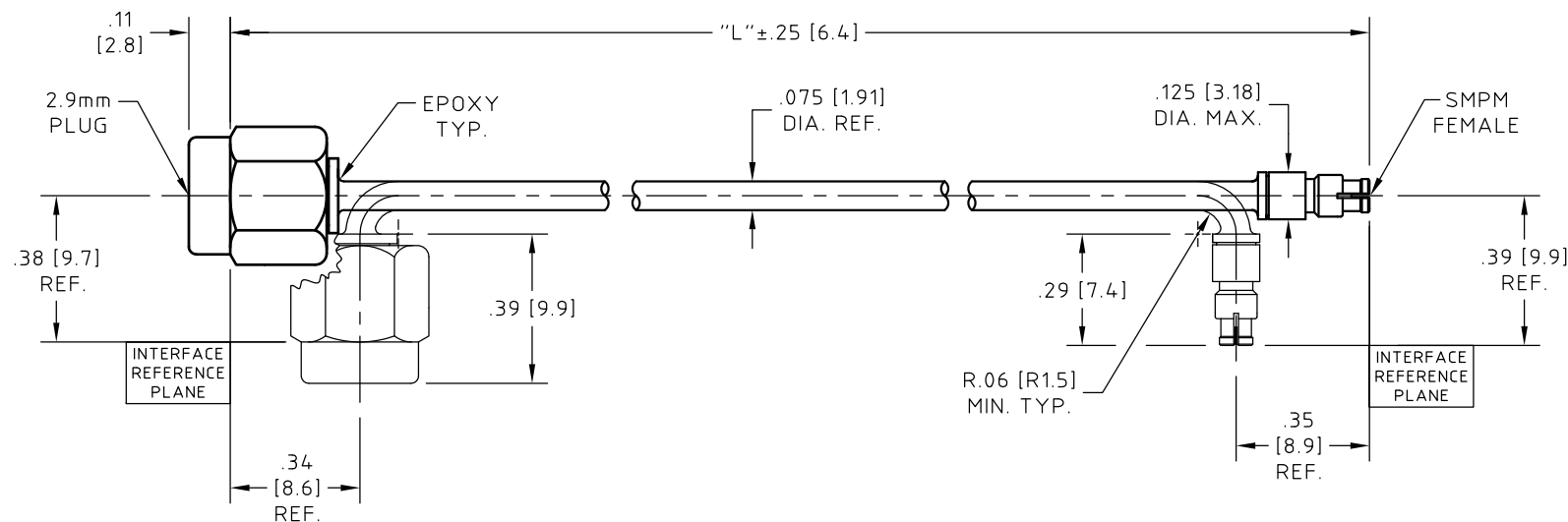


## CONTROL DRAWING

microbend KMR-XX

K



## NOTES:

- DESCRIPTION,  
CABLE ASSEMBLY, 2.9mm PLUG TO SMPM FEMALE,  
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 32041E.  
MEETS OR EXCEEDS MIL-DTL-17.  
SEE HUBER+SUHNER Astrolab CONTROL DRAWING  
FOR MATERIALS AND FINISHES.
- CONNECTOR -A-, 2.9mm PLUG:  
HUBER+SUHNER Astrolab P/N 29094KCR-32-41  
INTERFACE DIMENSIONS IAW MIL-STD-348.  
SEE HUBER+SUHNER Astrolab CONTROL DRAWING  
FOR MATERIALS AND FINISHES.
- CONNECTOR -B-, SMPM FEMALE:  
HUBER+SUHNER Astrolab P/N 29971CR-32-41  
INTERFACE DIMENSIONS IAW MIL-STD-348.  
SEE HUBER+SUHNER Astrolab CONTROL DRAWING  
FOR MATERIALS AND FINISHES.

## NOTES CONTINUED:

- MARKING:  
ALL MARKING WILL BE DONE ON PACKAGING.
- 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 10.0 LBS. [44.5 N].
- ATTENUATION FORMULAS:  
8A. CALCULATE AT 26.5 GHz  
(dB) = 1.80 dB/FT. X L(ft.)+.39 dB  
8B. CALCULATE AT 40.0 GHz  
(dB) = 2.25 dB/FT. X L(ft.)+.59 dB

| HUBER+SUHNER<br>Astrolab<br>PART NUMBER | DIMENSION<br>"L" | 2.0 GHz |         | 18.0 GHz |         | 26.5 GHz |         | 40.0 GHz |         |
|-----------------------------------------|------------------|---------|---------|----------|---------|----------|---------|----------|---------|
|                                         |                  | VSWR    | I.L. dB | VSWR     | I.L. dB | VSWR     | I.L. dB | VSWR     | I.L. dB |
| microbend KMR-2.5                       | 2.50 (63.5)      | 1.20:1  | 0.23    | 1.40:1   | 0.62    | 1.50:1   | 0.77    | 1.60:1   | 1.06    |
| microbend KMR-3                         | 3.00 (76.2)      | 1.20:1  | 0.25    | 1.40:1   | 0.68    | 1.50:1   | 0.85    | 1.60:1   | 1.15    |
| microbend KMR-3.5                       | 3.50 (88.9)      | 1.20:1  | 0.27    | 1.40:1   | 0.74    | 1.50:1   | 0.92    | 1.60:1   | 1.25    |
| microbend KMR-4                         | 4.00 (101.6)     | 1.20:1  | 0.29    | 1.40:1   | 0.80    | 1.50:1   | 1.00    | 1.60:1   | 1.34    |
| microbend KMR-4.5                       | 4.50 (114.3)     | 1.20:1  | 0.31    | 1.40:1   | 0.86    | 1.50:1   | 1.07    | 1.60:1   | 1.43    |
| microbend KMR-5                         | 5.00 (127.0)     | 1.20:1  | 0.33    | 1.40:1   | 0.92    | 1.50:1   | 1.15    | 1.60:1   | 1.53    |
| microbend KMR-5.5                       | 5.50 (139.7)     | 1.20:1  | 0.35    | 1.40:1   | 0.98    | 1.50:1   | 1.22    | 1.60:1   | 1.62    |
| microbend KMR-6                         | 6.00 (152.4)     | 1.20:1  | .037    | 1.40:1   | 1.05    | 1.50:1   | 1.30    | 1.60:1   | 1.72    |
| microbend KMR-7                         | 7.00 (177.8)     | 1.20:1  | 0.40    | 1.40:1   | 1.17    | 1.50:1   | 1.44    | 1.60:1   | 1.90    |
| microbend KMR-8                         | 8.00 (203.2)     | 1.20:1  | 0.44    | 1.40:1   | 1.29    | 1.50:1   | 1.59    | 1.60:1   | 2.09    |
| microbend KMR-9                         | 9.00 (228.6)     | 1.20:1  | 0.48    | 1.40:1   | 1.41    | 1.50:1   | 1.74    | 1.60:1   | 2.28    |
| microbend KMR-10                        | 10.00 (254.0)    | 1.20:1  | 0.52    | 1.40:1   | 1.53    | 1.50:1   | 1.89    | 1.60:1   | 2.47    |
| microbend KMR-11                        | 11.00 (279.4)    | 1.20:1  | 0.55    | 1.40:1   | 1.65    | 1.50:1   | 2.04    | 1.60:1   | 2.65    |
| microbend KMR-12                        | 12.00 (304.8)    | 1.20:1  | 0.59    | 1.40:1   | 1.77    | 1.50:1   | 2.19    | 1.60:1   | 2.84    |
| microbend KMR-                          |                  | 1.20:1  |         | 1.40:1   |         | 1.50:1   |         | 1.60:1   |         |

SEE NOTE 8

ROHS 6 COMPLIANT

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. EF  | 09/04/03 |
| ELEC. RF  | 09/04/03 |
| MECH. GSG | 09/04/03 |
| 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  
**CABLE ASSEMBLY, 2.9mm PLUG TO SMPM FEMALE, RUGGEDIZED**

|      |               |          |    |          |                                                                                                                            |              |                      |                             |          |
|------|---------------|----------|----|----------|----------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|-----------------------------|----------|
| K    | ECN No. 15606 | 06/10/13 | EB |          | THDS. TO BE IN ACCORD WITH U.S.<br>DEPT. OF COMM. SCREW THD. STDS.<br>FOR FEDERAL SERVICES 1950 SUPL.<br>TO HANDBOOK H 28. | SCALE<br>2:1 | CODE IDENT.<br>16301 | DWG NO.<br>microbend KMR-XX | REV<br>K |
| REV. | DESCRIPTION   | DATE     | BY | APPROVED |                                                                                                                            |              |                      |                             |          |