**CONTROL DRAWING**

**NOTES:**

1. **DESCRIPTION:**
   - CABLE ASSEMBLY, 2.9mm (SMK) PLUG TO 2.9mm (SMK) 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.

2. **CABLE:**
   - COAXIAL CABLE HUBER+SUHNER Astrolab P/N 32381E MEETS OR EXCEEDS MIL-DTL-17.
   - SEE HUBER+SUHNER Astrolab CONTROL DRAWING FOR MATERIALS AND FINISHES.

3. **CONNECTOR - A - 2.9mm (SMK) PLUG:**
   - SEE HUBER+SUHNER Astrolab CONTROL DRAWING FOR MATERIALS AND FINISHES.

4. **CONNECTOR - B - 2.9mm (SMK) PLUG:**
   - SAME AS CONNECTOR - A -

5. **MARKING:**
   - LOOSE FITTING WHITE SHEETING CAPTIVATED ON THE CABLE ASSEMBLY.
   - MARKING INCLUDES THE HUBER+SUHNER Astrolab PART NUMBER, CAGE CODE AND THE DATE CODE FOR DATE OF MANUFACTURE.

**METHODS & MATERIALS:**

- OTHER MARKING AS DEFINED BY CUSTOMER.
- NO MARKING ON CABLE ASSEMBLIES SHORTER THAN 3.00 [76.2] IN.
- MARKING ON PACKAGING ONLY.

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).

8. **ATTENUATION FORMULAS:**
   - 8A. CALCULATE AT 26.5 GHz
     - (dB) = 1.45 dB/ft. X Lift + 31 dB
   - 8B. CALCULATE AT 40.0 GHz
     - (dB) = 1.72 dB/ft. X Lift + 50 dB

9. **PHASE STABILITY VS. TEMPERATURE**
   - (PPM) = 300 MAX., -55°C TO 125°C.

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**HUBER+SUHNER Astrolab**

**PART NUMBER**

**DIMENSION**

<table>
<thead>
<tr>
<th>HUBER+SUHNER Astrolab</th>
<th>DIMENSION &quot;D&quot;</th>
<th>2.0 GHz</th>
<th>26.5 GHz</th>
<th>4.0 GHz</th>
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<tbody>
<tr>
<td><strong>PART NUMBER</strong></td>
<td><strong>VSWR</strong></td>
<td><strong>IL dB</strong></td>
<td><strong>VSWR</strong></td>
<td><strong>IL dB</strong></td>
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<tr>
<td>minibend CTKR-25</td>
<td>2.50 [63.5]</td>
<td>1.10:1</td>
<td>0.18</td>
<td>1.30:1</td>
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<td>minibend CTKR-3</td>
<td>3.00 [76.2]</td>
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<td>0.19</td>
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<td>minibend CTKR-35</td>
<td>3.50 [88.9]</td>
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<td>0.21</td>
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<td>minibend CTKR-4</td>
<td>4.00 [101.6]</td>
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<td>minibend CTKR-4.5</td>
<td>4.50 [114.3]</td>
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<td>0.24</td>
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<td>minibend CTKR-5</td>
<td>5.00 [127.0]</td>
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<td>minibend CTKR-5.5</td>
<td>5.50 [139.7]</td>
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<td>0.27</td>
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<td>0.31</td>
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<td>minibend CTKR-8</td>
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**ROHS 5/6 COMPLIANT**

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**DATE: 05/13/15**

**DRAWN BY:** GS

**CHECKED:** GS

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**CABLE ASSEMBLY, 2.9mm PLUG TO 2.9mm PLUG, RUGGEDIZED**

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**DRAWING NUMBER:** 16301

**REV:** B

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**NOTES:**

- UNLESS OTHERWISE SPECIFIED, CONCENTRICITY .004 T.I.R. CORNERS AND VII.05 MAX. RADIUS OR CHAMFER, SURFACE FINISH .05 RMS MICROINCHES OR BETTER.

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**SCALE:** 1:1

**CODE IDENT.** 16301

**DWG NO.** minibend CTKR-XX

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