**Test Cable**

50Ω 1FT  DC to 18 GHz

### Maximum Ratings

**Operating Temperature**  -55°C to 105°C

**Storage Temperature**  -55°C to 105°C

Permanent damage may occur if any of these limits are exceeded.

- **Shielding Effectiveness**: +100 dB
- **Power Handling at 25°C**: 89.9W Max. at 0.4 GHz
- **536W Max. at 1 GHz**
- **360W Max. at 2 GHz**
- **180W Max. at 6 GHz**
- **117W Max. at 12 GHz**
- **88W Max. at 18 GHz**

### Notes

- **A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.**
- **B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit’s applicable established test performance criteria and measurement instructions.**
- **C. The parts covered by this specification document are subject to Mini-Circuit’s standard limited warranty and terms and conditions (collectively, “Standard Terms”); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits’ website at www.minicircuits.com/MCLStore/terms.jsp

### Outline Drawing

**Outline Dimensions**  (inch mm)

- **A**  1.00  25.4
- **B**  0.30  7.62
- **C**  0.42  10.67
- **D**  0.42  10.67
- **E**  0.06  0.16
- **T**  0.02  0.05

### Features

- **RoHS compliant**
- **Wideband coverage, DC to 18 GHz**
- **Extra rugged construction with strain relief for longer life**
- **Stainless steel SMA connectors for long mating-cycle life**
- **Useful over temperature range, -55°C to 105°C**
- **Triple shield cable for excellent shielding effectiveness**
- **Flexible for easy connection & bend radius**
- **Superior stability of insertion loss, VSWR & phase vs. flexing**
- **6 month guarantee**

### Applications

- **High volume production test stations**
- **Research & development labs**
- **Environmental & temperature test chambers**
- **Replacement for OEM test port cables**
- **Field RF testing**
- **Cellular infrastructure site testing**

### Electrical Specifications at 25°C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Condition (GHz)</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency Range</strong></td>
<td></td>
<td>DC - 2.5</td>
<td>—</td>
<td>0.22</td>
<td>0.35</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td></td>
<td>2.5 - 6</td>
<td>—</td>
<td>0.67</td>
<td>0.85</td>
</tr>
<tr>
<td><strong>Insertion Loss</strong></td>
<td></td>
<td>6 - 12</td>
<td>—</td>
<td>0.75</td>
<td>1.05</td>
</tr>
<tr>
<td><strong>Return Loss</strong></td>
<td></td>
<td>DC - 2.5</td>
<td>—</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td><strong>Typical Performance Data</strong></td>
<td></td>
<td>2.5 - 6</td>
<td>—</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td><strong>Frequency (MHz)</strong></td>
<td></td>
<td>6 - 12</td>
<td>—</td>
<td>17</td>
<td>27</td>
</tr>
<tr>
<td><strong>Insertion Loss (dB)</strong></td>
<td></td>
<td>12 - 18</td>
<td>—</td>
<td>17</td>
<td>27</td>
</tr>
</tbody>
</table>

### Cable Cross Section

- **Jacket**: Clear FEP
- **Interlayer**: Silver-Plated Copper Flat Ribbon Braid
- **Shield**: Aluminum-Polymide Tape Interlayer 36 GA
- **Dielectric**: Silver-Plated Copper Braid (90%) and PTFE
- **Inner Conductor**: Solid Copper Clad Steel
- **Outer Shield**: Silver-Plated Beryllium Copper Center Contacts

### Cable Construction

- **Inner Conductor**: Solid Silver Plated Copper Clad Steel
- **Dielectric**: Solid PTFE
- **Shield**: Silver-Plated Copper Flat Ribbon Braid
- **Interlayer**: Aluminum-Polymide Tape Interlayer 36 GA
- **Jacket**: Blue FEP

### Connectors

<table>
<thead>
<tr>
<th>Conn1</th>
<th>Conn2</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMA-MALE</td>
<td>SMA-MALE</td>
<td>CBL-1FT-SMSM+</td>
</tr>
</tbody>
</table>

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Notes

1. Custom sizes available, consult factory.

### Product Guarantee*

**Mini-Circuits** will repair or replace your test cable at its option if the connector attachment fails within six months of shipment. This guarantee excludes cables or connector interface damage from misuse or abuse.

---

**www.minicircuits.com**  P.O. Box 350166, Brooklyn, NY 11235-0003  (718) 934-4500  sales@minicircuits.com