

# **Armored Test Cable**

### DC to 40 GHz Low Loss

#### Maximum Ratings

| maximum matings   |                |      |          |  |  |  |  |  |  |
|---|----------------|------|----------|--|--|--|--|--|--|
| Operating Temperature   | -55°C to +85°C |      |          |  |  |  |  |  |  |
| Storage Temperature   | -55°C to +85°C |      |          |  |  |  |  |  |  |
| Power Handling at 25°C,   | 53W            | at   | 2 GHz    |  |  |  |  |  |  |
| Sea Level   | 17W            | at   | 18 GHz   |  |  |  |  |  |  |
|   | 15W            | at 2 | 26.5 GHz |  |  |  |  |  |  |
|   | 11W            | at   | 40 GHz   |  |  |  |  |  |  |
| Coupling Nut Torque   |                | 1    | 1.09 N·M |  |  |  |  |  |  |
| Permanent damage may occur if any of these limits are exceeded. |                |      |          |  |  |  |  |  |  |

#### **Features**

- extremely low insertion loss
- · extra rugged construction includes protective shield and strain relief for longer life
- stainless steel 40 GHz connector for long mating-cycle life
- double shield cable for excellent shielding effectiveness
- 40 GHz connector mates with 2.92 mm, K\*, 3.5mm, SMA

#### **Applications**

Frequency Range

military and defense applications
research & development labs

Parameter

## KBL-1.5FT-LOW+



CASE STYLE: MA1628-1.5

| Connectors  | Model          |
|-------------|----------------|
| 2.92mm Male | KBL-1.5FT-LOW+ |

#### +RoHS Compliant

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

Тур.

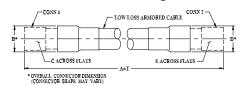
Max.

40

Units

GHz

### **Outline Drawing**



#### Outline Dimensions (inch)

| wt    | T        |         | E    | D     | С    | В     | Α      |      |
|-------|----------|---------|------|-------|------|-------|--------|------|
| grams | mm       | Inch    | .312 | .40   | .312 | .40   | Meters | Feet |
| 75    | +12.7/-0 | +.50/-0 | 7.92 | 10.16 | 7.92 | 10.16 | 0.46   | 1.50 |

1.5 FT Length DC - 6 0.49 0.85 1.35 6-18 0.85 Insertion Loss dB 18-26.5 1.10 1.65 26.5-40 1.41 1.95 DC - 6 17 25 6-18 17 20 Return Loss dB 18-26.5 16 18 26.5-40

Electrical Specifications at 25°C

Min.

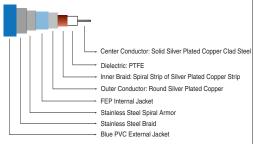
DC

Condition (GHz)

Typical Performance Data

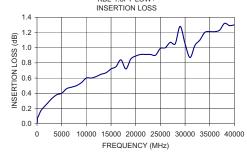
#### Insertion Loss Frequency **Return Loss** (MHz) (dB) MALE 1 MALE 2 50.0 0.01 32.6 32.3 2000.0 35.5 35.3 4000.0 0.38 29.8 29.2 6000.0 0.46 27.4 27.3 10000.0 0.60 25.9 25.4 15000.0 0.72 24.3 25.8 18000.0 0.72 25.5 21.0 20000.0 0.89 23.3 26000.0 1.00 19.3 28000.0 1.05 18.6 18.3 30000.0 1.05 20.9 16.6 32000.0 1.03 24.0 24.3 36000.0 1.21 36.3 33.6 38000.0 1.32 25.0 23.8 40000.0

### **Cable Construction**

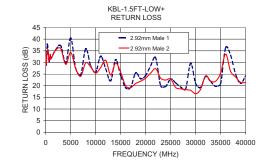


#### **Product Guarantee**

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 cable or connector interface damage from misuse or abuse.



KBI -1 5FT-I OW+



- 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-Circuits 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

<sup>\*</sup>K Connector is a trademark of Anritsu Custom sizes available, consult factory.