

ON-CATALO

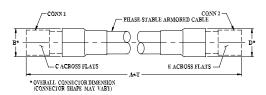
Armored Test Cable

DC to 40 GHz Phase Stable 2M

Maximum Ratings

| Operating Temperature | -5 | 5°C | to +85°C | |
|---|------|------|----------|--|
| Storage Temperature | -5 | 5°C | to +85°C | |
| Power Handling at 25°C, | 39W | at | 2 GHz | |
| Sea Level | 10W | at | 18 GHz | |
| | 6W | at 2 | 26.5 GHz | |
| | 3.5W | at | 40 GHz | |
| Coupling Nut Torque | | 1 | I.09 N·M | |
| Permanent damage may occur if any of these limits are exceeded. | | | | |

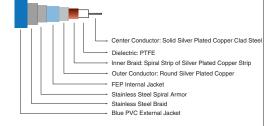
Outline Drawing



Outline Dimensions (inch)

| | A | В | С | D | Е | Т | • | wt |
|------|--------|------|------|------|------|---------|----------|-------|
| Feet | Meters | .36 | .312 | .36 | .312 | Inch | mm | grams |
| 6.56 | 2.00 | 9.14 | 7.92 | 9.14 | 7.92 | +157/-0 | +40.0/-0 | 168 |

Cable Construction



Product Guarantee

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

Features

- outstanding phase stability
- 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, K2, 3.5mm, SMA

Applications

- military and defense applications
- · research & development labs

KBL-2M-PHS+



CASE STYLE: MB1629-6.56

| Connectors | Model |
|-------------|-------------|
| 2.92mm Male | KBL-2M-PHS+ |

+RoHS Compliant

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

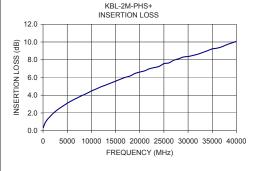
Electrical Specifications at 25°C

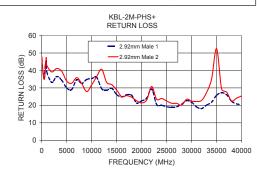
| Parameter | Condition (GHz) | Min. | Тур. | Max. | Units | |
|--|-----------------|------|-------|------|--------|--|
| Frequency Range | | DC | | 40 | GHz | |
| Length | | | 2 | | М | |
| Insertion Loss | DC - 6 | _ | 3.54 | 4.1 | dB | |
| | 6 - 18 | _ | 6.32 | 7.7 | | |
| | 18 - 26.5 | _ | 8.11 | 9.6 | | |
| | 26.5 - 40 | _ | 10.25 | 12.2 | | |
| | DC - 6 | 17 | 30 | _ | | |
| Return Loss | 6 - 18 | 17 | 20 | _ | dB | |
| Return Loss | 18 - 26.5 | 14 | 18 | _ | l ap | |
| | 26.5 - 40 | 14 | 17 | _ | | |
| | DC - 6 | _ | _ 0.5 | | | |
| Phase Change with Flexure ³ | 6 - 18 | _ | 1.0 | _ | Degree | |
| | 18 - 26.5 | _ | 2.0 | _ | | |
| | 26.5 - 40 | _ | 3.0 | _ | | |

² K Connector is a trademark of Anritsu

Typical Performance Data

| | 71 | | | | |
|--------------------|-------|--------|---------------------|--|--|
| Frequency (MHz) | | | Return Loss (dB) | | |
| | | MALE 1 | MALE 2 | | |
| 50.0 | 0.33 | 47.4 | 47.8 | | |
| 2000.0 | 1.90 | 33.1 | 39.1 | | |
| 4000.0 | 2.73 | 34.4 | 39.5 | | |
| 6000.0 | 3.40 | 29.1 | 32.7 | | |
| 10000.0 | 4.47 | 35.3 | 31.8 | | |
| 15000.0 | 5.58 | 26.2 | 28.8 | | |
| 18000.0 | 6.16 | 25.8 | 24.6 | | |
| 20000.0 | 6.61 | 22.6 | 21.4 | | |
| 26000.0 | 7.63 | 18.8 | 21.2 | | |
| 28000.0 | 8.10 | 20.6 | 20.1 | | |
| 30000.0 | 8.36 | 21.7 | 22.4 | | |
| 32000.0 | 8.62 | 18.2 | 22.8 | | |
| 36000.0 | 9.30 | 27.2 | 29.4 | | |
| 38000.0 | 9.69 | 22.4 | 22.6 | | |
| 40000.0 | 10.07 | 20.4 | 25.4 | | |





- 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

³ Phase stability is defined as variation in phase (deg.) versus flexure wherein flexing of the cable is performed in a two-dimensional manner. When twisting the cable in three dimensions the variation in phase will be greater and a maximum value is not specified.