

ON-CATALO

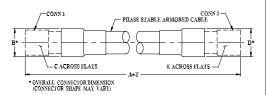
Armored Test Cable

DC to 40 GHz Phase Stable

Maximum Ratings

| Maximum Hattings | | | |
|---|------|------|----------|
| 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. | | | |

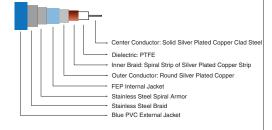
Outline Drawing



Outline Dimensions (inch)

| | A | В | С | D | Е | | T | wt |
|------|--------|------|------|------|------|---------|----------|-------|
| Feet | Meters | .36 | .312 | .36 | .312 | Inch | mm | grams |
| 2.00 | 0.61 | 9.14 | 7.92 | 9.14 | 7.92 | +.50/-0 | +12.7/-0 | 69 |

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.

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-2FT-PHS+



CASE STYLE: MB1629-2

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

+RoHS Compliant

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

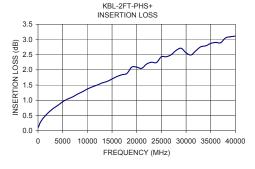
Electrical Specifications at 25°C

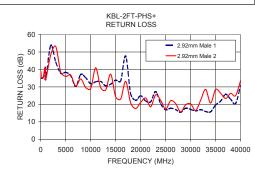
| Parameter | Condition (GHz) | Min. | Тур. | Max. | Units | |
|--|-----------------|------|------|------|--------|--|
| Frequency Range | | DC | | 40 | GHz | |
| Length | | | 2 | | FT | |
| Insertion Loss | DC - 6 | _ | 1.09 | 1.45 | -ID | |
| | 6 - 18 | _ | 2.01 | 2.7 | | |
| | 18 - 26.5 | _ | 2.58 | 3.3 | dB | |
| | 26.5 - 40 | _ | 3.27 | 4.15 | | |
| | DC - 6 | 17 | 30 | _ | | |
| Return Loss | 6 - 18 | 17 | 20 | – | dB | |
| Return Loss | 18 - 26.5 | 14 | 18 | _ | | |
| | 26.5 - 40 | 14 | 17 | _ | | |
| Phase Change with Flexure ³ | DC - 6 | _ | 0.5 | _ | | |
| | 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

| *• | | | | | |
|--------------------|------|--------|---------------------|--|--|
| Frequency (MHz) | | | Return Loss (dB) | | |
| | | MALE 1 | MALE 2 | | |
| 50.0 | 0.12 | 37.8 | 38.8 | | |
| 2000.0 | 0.58 | 53.7 | 48.3 | | |
| 4000.0 | 0.83 | 37.8 | 38.5 | | |
| 6000.0 | 1.04 | 36.5 | 36.8 | | |
| 10000.0 | 1.37 | 31.8 | 29.0 | | |
| 15000.0 | 1.70 | 33.9 | 24.3 | | |
| 18000.0 | 1.88 | 25.9 | 20.8 | | |
| 20000.0 | 2.09 | 24.9 | 21.1 | | |
| 26000.0 | 2.43 | 17.8 | 22.1 | | |
| 28000.0 | 2.64 | 15.5 | 15.7 | | |
| 30000.0 | 2.56 | 17.1 | 20.2 | | |
| 32000.0 | 2.63 | 17.1 | 22.3 | | |
| 36000.0 | 2.90 | 21.8 | 26.4 | | |
| 38000.0 | 3.05 | 22.9 | 26.3 | | |
| 40000.0 | 3.11 | 30.8 | 33.5 | | |





- 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

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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.