

Test Cable

50Ω 3FT DC to 40 GHz Low Loss

E40-3FT-KMKM+



CASE STYLE: RF2512-3

| | |
|-------------|---------------|
| Connectors | Model |
| 2.92mm Male | E40-3FT-KMKM+ |

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

Maximum Ratings

| | | |
|-------------------------|----------------|-------------|
| Operating Temperature | -40°C to +70°C | |
| Storage Temperature | -55°C to +85°C | |
| Power Handling at 25°C, | 54W | at 2 GHz |
| Sea Level | 17W | at 18 GHz |
| | 13W | at 26.5 GHz |
| | 11W | at 40 GHz |

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

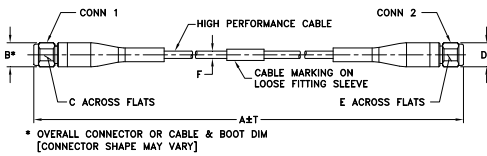
Features

- low insertion loss
- stainless steel 40 GHz connector for long mating-cycle life
- good amplitude and phase stability vs flexing over frequency
- 40 GHz connector mates with 2.92 mm, K*, 3.5mm, SMA

Applications

- military and defense applications
- research & development labs
- field RF testing
- environmental and temperature test chambers

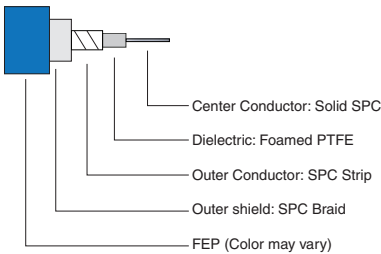
Outline Drawing



Outline Dimensions (inch/mm)

| | A | B | C | D | E | F | T | wt | | |
|--------|------|------|------|------|------|------|------|--------|----------|----|
| Feet | 0.36 | 0.31 | 0.36 | .312 | .100 | Inch | MM | grams | | |
| Meters | 3.00 | 0.91 | 9.25 | 7.92 | 9.25 | 7.92 | 2.54 | +72/-0 | +18.3/-0 | 35 |

Cable Construction



Electrical Specifications at 25°C

| Parameter | Condition (GHz) | Min. | Typ. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range | | DC | | 40 | GHz |
| Length | | | 3 | | FT |
| Insertion Loss | DC - 6 | — | 1.5 | 1.8 | dB |
| | 6-18 | — | 2.9 | 3.3 | |
| | 18-26.5 | — | 3.8 | 4.2 | |
| | 26.5-40 | — | 5.1 | 5.5 | |
| Return Loss | DC - 6 | 21 | 26 | — | dB |
| | 6-18 | 18 | 20 | — | |
| | 18-26.5 | 17 | 20 | — | |
| | 26.5-40 | 16 | 16 | — | |

*K Connector is a trademark of Anritsu
Custom sizes available, consult factory.

Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) | Return Loss (dB) | |
|-----------------|---------------------|------------------|-------------|
| | | 2.92mm Male 1 | 2.92mm Male |
| 100 | 0.21 | 47.6 | 46.4 |
| 2000 | 0.92 | 40.3 | 37.5 |
| 4000 | 1.28 | 50.6 | 37.9 |
| 6000 | 1.57 | 38.1 | 40.4 |
| 10000 | 2.03 | 29.9 | 32.7 |
| 15000 | 2.52 | 26.2 | 27.8 |
| 18000 | 2.78 | 39.4 | 36.6 |
| 20000 | 2.95 | 32.0 | 37.2 |
| 26000 | 3.47 | 27.3 | 27.0 |
| 28000 | 3.64 | 22.9 | 22.1 |
| 30000 | 3.78 | 22.5 | 22.1 |
| 32000 | 3.93 | 23.8 | 21.5 |
| 36000 | 4.21 | 25.8 | 24.1 |
| 38000 | 4.35 | 26.2 | 25.4 |
| 40000 | 4.50 | 23.8 | 24.6 |

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.

Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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

