

# Test Cable

50Ω 1M DC to 40 GHz Low Loss

## E40-1M-KMKM+



CASE STYLE: RF2512-3.28

Connectors	Model
2.92mm Male	E40-1M-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.

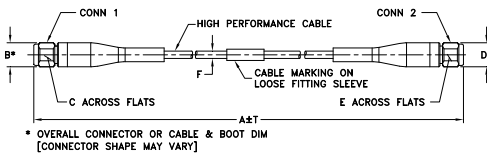
### Features

- 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

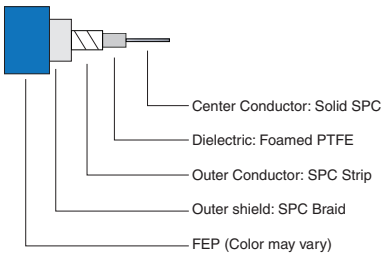
### Outline Drawing



### Outline Dimensions (inch mm)

	A	B	C	D	E	F	T	wt
Feet	3.28	1.00	0.36	0.31	0.36	.312	.100	
Meters			9.25	7.92	9.25	7.92	2.54	+79/-0 +20.0/-0

### Cable Construction



### Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		40	GHz
Length			1		M
Insertion Loss	DC - 6	—	1.7	2	dB
	6-18	—	3.2	3.6	
	18-26.5	—	4.0	4.5	
Return Loss	26.5-40	—	5.4	5.8	dB
	DC - 6	23	26	—	
	6-18	19	20	—	
Return Loss	18-26.5	17	20	—	dB
	26.5-40	16	18	—	

\*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	0.22	55.8	50.2
2000	0.97	39.3	40.2
4000	1.33	37.3	42.1
6000	1.63	32.6	34.4
10000	2.10	36.1	49.8
15000	2.62	26.8	32.2
18000	2.89	30.3	37.6
20000	3.06	29.4	51.9
26000	3.60	26.2	34.6
28000	3.76	25.1	28.5
30000	3.94	23.4	26.9
32000	4.06	24.8	30.7
36000	4.40	22.1	23.2
38000	4.53	24.5	31.6
40000	4.71	21.8	23.3

### 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](http://www.minicircuits.com/MCLStore/terms.jsp)

