

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.

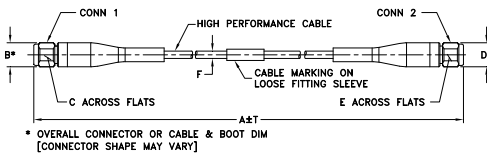
Features

- 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

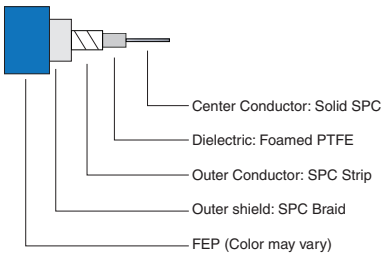
Outline Drawing



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

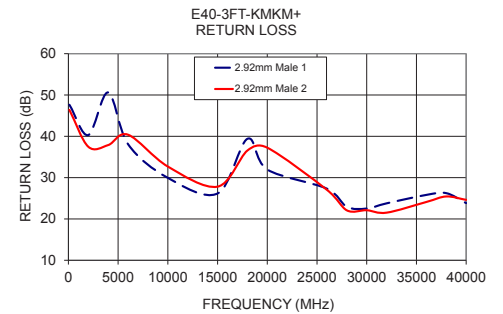
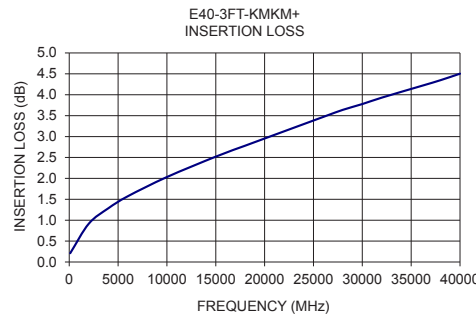
Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	
		2.92mm Male 1	2.92mm Male
100	0.21	47.6	46.4
2000	0.92	40.3	37.5
4000	1.28	50.6	37.9
6000	1.57	38.1	40.4
10000	2.03	29.9	32.7
15000	2.52	26.2	27.8
18000	2.78	39.4	36.6
20000	2.95	32.0	37.2
26000	3.47	27.3	27.0
28000	3.64	22.9	22.1
30000	3.78	22.5	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

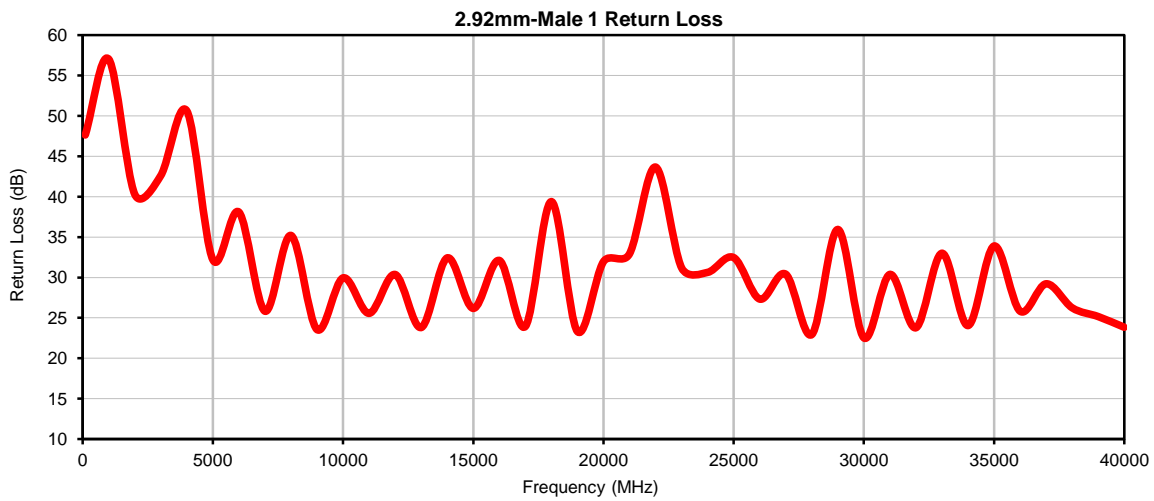


Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	2.92mm-MALE 1 RETURN LOSS (dB)	2.92mm-MALE 2 RETURN LOSS (dB)
100	0.21	47.6	46.4
1000	0.66	57.0	53.8
2000	0.92	40.3	37.5
3000	1.11	42.6	48.1
4000	1.28	50.6	37.9
5000	1.43	32.2	32.0
6000	1.57	38.1	40.4
7000	1.71	25.8	26.8
8000	1.81	35.2	34.3
9000	1.95	23.5	23.6
10000	2.03	29.9	32.7
11000	2.15	25.6	26.0
12000	2.24	30.4	38.9
13000	2.35	23.8	24.0
14000	2.42	32.4	37.0
15000	2.52	26.2	27.8
16000	2.60	32.1	43.6
17000	2.71	23.9	25.3
18000	2.78	39.4	36.6
19000	2.90	23.3	24.7
20000	2.95	32.0	37.2
21000	3.02	32.9	34.4
22000	3.09	43.7	35.5
23000	3.18	31.2	33.0
24000	3.30	30.6	29.2
25000	3.39	32.5	30.6
26000	3.47	27.3	27.0
27000	3.54	30.4	26.5
28000	3.64	22.9	22.1
29000	3.69	35.9	28.4
30000	3.78	22.5	22.1
31000	3.84	30.4	31.6
32000	3.93	23.8	21.5
33000	3.99	33.0	25.6
34000	4.07	24.0	23.2
35000	4.14	33.9	26.3
36000	4.21	25.8	24.1
37000	4.27	29.2	29.4
38000	4.35	26.2	25.4
39000	4.43	25.2	29.1
40000	4.50	23.8	24.6

Ultra Flex Test Cable, 2.92mm-M/2.92mm-M E40-3FT-KMKM+

Typical Performance Curves



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 • Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site

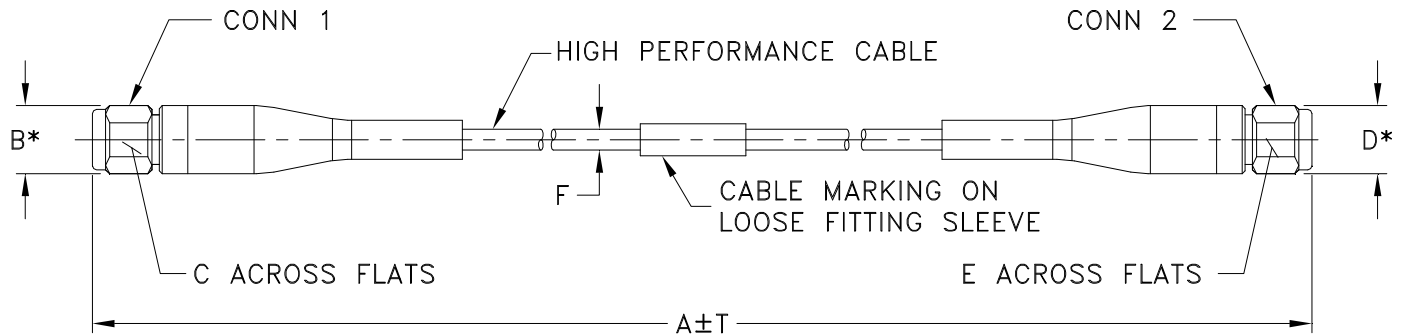


The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS

REV. OR
E40-3FT-KMKM+
1/29/2018
Page 1 of 1

Outline Dimensions



* OVERALL CONNECTOR OR CABLE & BOOT DIM
[CONNECTOR SHAPE MAY VARY]

RF2512 SERIES

2.92mm MALE (CONN-1)

2.92mm MALE (CONN-2)

CASE STYLE #	A		B	C	D	E	F	T		WEIGHT GRAMS
	FEET	METERS						INCH	MM	
RF2512-2	2.00	.61	.36 (9.25)	.312 (7.93)	.36 (9.25)	.312 (7.93)	.100 (2.54)	+.50/-0	+12.7/-0	30
RF2512-3	3.00	.91						+.72/-0	+18.3/-0	35
RF2512-3.28	3.28	1.00						+.79/-0	+20.0/-0	36
RF2512-6	6.00	1.83						+1.44/-0	+36.6/-0	50

Unless otherwise specified dimensions are in inches (mm).

Tolerances: 2Pl. $\pm .03$; 3Pl. $\pm .015$

Note:

1. High Performance very Flexible Cable.



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-40° to 70° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 85° C Ambient Environment	Individual Model Data Sheet
Mechanical Flexing	4,000 cycles During each cycle, cable flexed from 90° through 0° to -90° and back with a Radii of 3 inches	---