

DC to 50 GHz Low Loss 50Ω

Maximum Ratings

waxiiiiuiii natiiig	3		
Operating Temperature	-4	0°C	to +70°C
Storage Temperature	-5	5°C	to +85°C
Power Handling at 25°C,	54W	at	2 GHz
Sea Level	17W	at	18 GHz
	13W	at 2	26.5 GHz
	11W	at	40 GHz
	7W	at	50 GHz

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

Features

- low insertion loss
- stainless steel 50 GHz connector for long mating-cycle life
- good amplitude and phase stability vs flexing over frequency
- 50 GHz connector mates with 2.4 mm, V*

Applications

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

E50-3FT-VMVM+



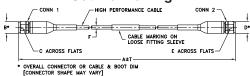
CASE STYLE: RG2513-3

Connectors	Model
2.4mm Male	E50-3FT-VMVM+

+RoHS Compliant

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

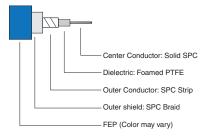
Outline Drawing



Outline Dimensions (inch)

F	A	В	С	D	E	F		T	wt
Feet	Meters	0.36	.312	0.36	.312	.100	Inch	MM	grams
3.00	0.91	9.14	7.92	9.14	7.92	2.54	+.72/-0	+18.3/-0	41

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.

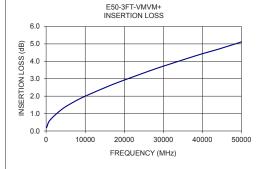
Electrical Specifications at 25°C

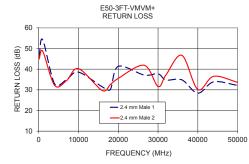
Parameter	Condition (GHz)	Min.	Тур.	Max.	Units	
Frequency Range		DC		50	GHz	
Length		3			FT	
Insertion Loss	DC - 18	_	2.8	3.3		
	18 - 26.5	_	3.5	4.2	dB	
	26.5 - 40	_	4.4	5.5		
	40 - 50	_	5.1	6.3		
	DC - 18	19	20	_		
Return Loss	18 - 26.5	17	20	_	dB	
	26.5 - 40	16	18	_		
	40 - 50	15	17	_		

^{*}V Connector is a trademark of Anritsu Custom sizes available, consult factory.

Typical Performance Data

71				
Insertion Loss (dB)	Return Loss (dB)			
	2.4 mm Male 1	2.4 mm Male 2		
0.19	46.3	44.9		
0.62	54.2	48.7		
1.24	32.9	32.2		
1.66	35.0	34.5		
2.00	38.6	40.2		
2.58	31.4	29.6		
2.75	30.2	32.6		
2.92	41.4	35.5		
3.45	37.2	41.9		
3.72	37.7	31.6		
3.86	34.8	37.2		
4.15	34.8	46.7		
4.44	28.4	30.2		
4.69	33.9	36.6		
5.11	32.2	33.7		
	0.19 0.62 1.24 1.66 2.00 2.58 2.75 2.92 3.45 3.72 3.86 4.15 4.44 4.69	Insertion Loss (dB) Retur (d 2.4 mm Male 1 0.19 46.3 0.62 54.2 1.24 32.9 1.66 35.0 2.00 38.6 2.58 31.4 2.75 30.2 2.92 41.4 3.45 37.2 3.72 37.7 3.86 34.8 4.15 34.8 4.15 34.8 4.44 28.4 4.69 33.9		





- 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