

# Coaxial Termination

## ANNEF-50E+

50Ω DC to 65 GHz

### The Big Deal

- Ultra-wideband, DC to 65 GHz
- Excellent return loss, 23 dB typ.
- Input power handling up to 1W
- Mates with 2.4mm connector types



CASE STYLE: LL2592-2

### Product Overview

Mini-Circuits' ANNEF-50E+ is an ultra-wideband 50 termination capable of absorbing signals up to 1W from DC to 65 GHz. It provides excellent return loss across its entire operating frequency range, effectively dissipating signal power with minimal reflections. This model has a 1.85mm-female connector, allowing connections with 2.4mm type connectors. The unit features rugged construction for a long life of use and comes in a stainless steel case and beryllium copper center conductor measuring only 0.65" (l) x 0.31" (dia.).

### Key Features

Feature	Advantages
Ultra-wideband, DC to 65 GHz	Extremely wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Good Return Loss: • 23 dB typ.	Good return loss minimizes signal reflections across multiple-decade frequency range.
1.85mm-female connector mates with 2.4mm connector	Provides flexible connection options, avoiding the need for extra adapters.
Power handling up to 1W	ANNEF-50E+ meets a wide range of system power requirements in a small device size.
Wide operating temperature range, -55 to +100°C	Withstands tough operating conditions and is suitable for use near high power components where heat rise is common.

#### Notes

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



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## 1.85mm-Female

## ANNEF-50E+

50Ω DC to 65 GHz

### Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

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

### Features

- Wideband coverage, DC to 65 GHz
- Return loss, 23 dB typ.
- Rugged construction
- 1.85 mm connector mates connectors with 2.4mm connectors

### Applications

- Cellular communications
- Satellite communications
- Test set-up
- Defense & radar



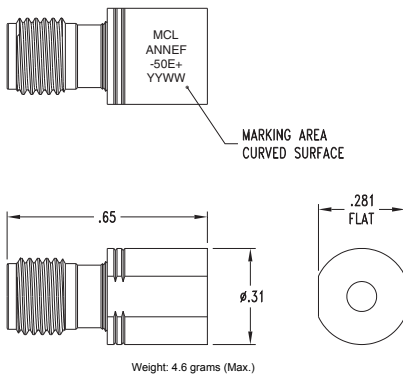
CASE STYLE: LL2592-2

Connector	Model
1.85mm-Female	ANNEF-50E+

### +RoHS Compliant

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

### Outline Drawing



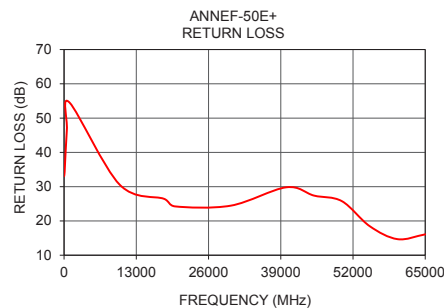
### Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	65	GHz
Impedance			50		Ohms
Return Loss	DC - 18	20.8	34	—	dB
	18 - 40	17.7	27	—	
	40 - 65	10.0	23	—	
Input Power <sup>1</sup>	DC - 65	—	—	1	W

1. Up to 25°C, derates linearly to 100mW at 100°C.

### Typical Performance Data

Frequency (MHz)	Return Loss (dB)
10	33.05
100	34.31
500	46.58
1000	54.50
10000	30.59
18000	26.45
20000	24.24
30000	24.45
40000	29.82
45000	27.39
50000	25.77
55000	18.48
60000	14.69
65000	16.09



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