

# Coaxial Termination

## ANNEF-50+

50Ω DC to 18 GHz

### The Big Deal

- Ultra-wideband, DC to 18 GHz
- Excellent return loss, 23 dB typ. up to 18 GHz
- Input power handling up to 1W



CASE STYLE: LL2641

### Product Overview

Mini-Circuits' ANNEF-50+ is a wideband 50Ω termination capable of absorbing signals up to 1W from DC to 18 GHz. It provides excellent return loss across its entire operating frequency range, effectively dissipating signal power with minimal reflections. This model has a SMA-female connector. The unit features rugged construction for a long life of use and comes in a gold plated brass body with a gold plated beryllium copper center contact. It only measures 0.56"(l) x 0.36" (dia.).

### Key Features

Feature	Advantages
Wideband, DC to 18 GHz	Extremely wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Good return loss: • 23 dB up to 18 GHz	Good return loss minimizes signal reflections across multiple-decade frequency range.
Power handling up to 1W	ANNEF-50+ 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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## SMA-Female

## ANNEF-50+

50Ω DC to 18 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 18 GHz
- return loss, 23 dB typ. up to 18 GHz
- rugged construction

### Applications

- test and measurement equipment
- test labs
- defense and aerospace



Generic photo used for illustration purposes only

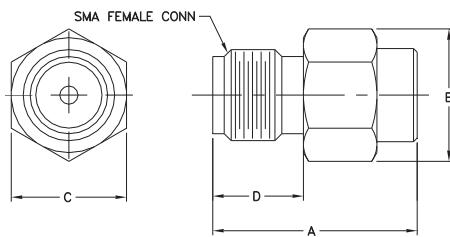
CASE STYLE: LL2641

Connector	Model
SMA-Female	ANNEF-50+

### +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	—	18	GHz
Impedance			50		Ohms
Return Loss	DC - 4	30	45	—	dB
	4 - 8	25	40	—	
	8 - 18	20	36	—	
Input Power <sup>1</sup>	DC - 18	—	—	1	W

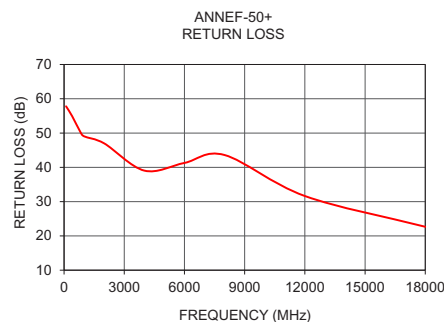
1. Up to 25°C, derates linearly to 325mW at 100°C.

### Typical Performance Data

Frequency (MHz)	Return Loss (dB)
100	57.80
400	54.91
800	50.37
1000	49.04
2000	46.98
4000	39.04
6000	41.29
8000	43.59
12000	31.63
18000	22.66

### Outline Dimensions (inch/mm)

A	B	C	D	E	wt
.54	.35	.315	.25	--	grams
13.7	9.0	8.0	6.4	--	3.35



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