



COAXIAL

# Termination

## ANNEF-50K+

50Ω DC to 40 GHz 2.92 mm-Female

### THE BIG DEAL

- Ultra-Wideband, DC to 40 GHz
- Excellent Return Loss, 6 dB typ. up to 40 GHz
- Input Power Handling up to 1W
- Mates with 3.5mm and SMA Connector



Generic photo used for illustration purposes only

Model No.	ANNEF-50K+
Case Style	LL2592
Connectors	2.92 mm-Female

### +RoHS Compliant

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

### APPLICATIONS

- Test and Measurement Equipment
- Test Labs
- Defense and Aerospace
- Q and V band Communication Links

### PRODUCT OVERVIEW

Mini-Circuits' ANNEF-50K+ is an ultra-wideband 50Ω termination capable of absorbing signals up to 1W from DC to 40 GHz. It provides excellent return loss across its entire operating frequency range, effectively dissipating signal power with minimal reflections. This model has a 2.92mm-female connector, mechanically compatible with 3.5mm-female and SMA male connectors. The unit features rugged construction for a long life of use and comes in a passivated stainless steel case measuring only 0.61"(l) x 0.31" (dia.).

### KEY FEATURES

Features	Advantages
Ultra-Wideband, DC to 40 GHz	Extremely wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Good Return Loss: 26 dB up to 40 GHz	Good return loss minimizes signal reflections across multiple-decade frequency range.
2.92 mm connector mates with 3.5 mm and SMA connectors	Provides flexible connection options, avoiding the need for extra adapters.
Power Handling up to 1W	ANNEF-50K+ meets a wide range of system power requirements in a small device size.
Wide Operating Temperature Range, -55 to +125 °C	Withstands tough operating conditions and is suitable for use near high power componentry where heat rise is common.

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ANNEF-50K+  
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### ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	–	40	GHz
Impedance			50		Ohms
Return Loss	DC - 40	19.1	26	–	dB
Input Power <sup>1</sup>	DC - 40	–	–	1	W

1. At 25°C, derate linearly to 100 mW at 125°C.

### ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

Parameter	Ratings
Operating Temperature	-55 °C to +125 °C
Storage Temperature	-55 °C to +125 °C

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



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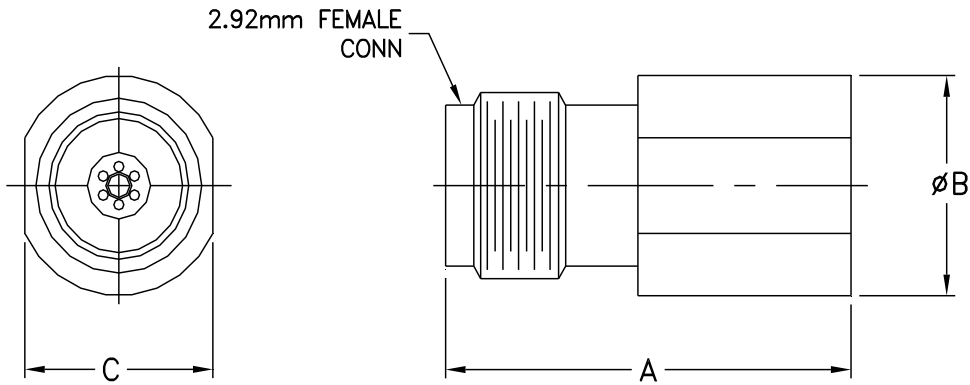
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### OUTLINE DRAWING



### OUTLINE DIMENSIONS (Inch/mm)

A	B	C	D	E	wt
.605	.312	.281	—	—	grams
15.4	7.9	7.1	—	—	4.2



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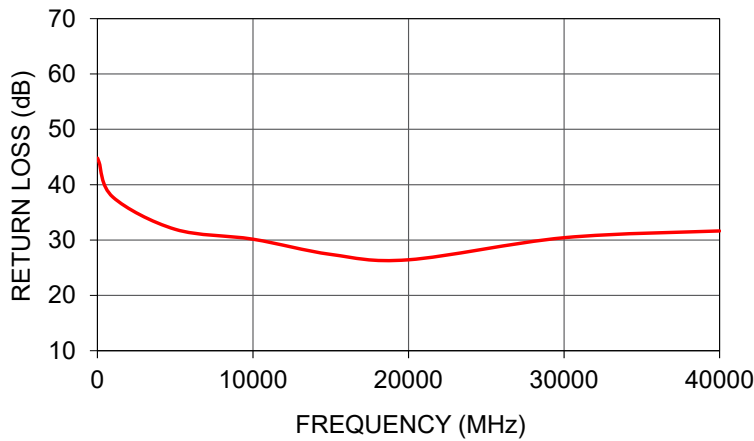
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### TYPICAL PERFORMANCE DATA

Frequency (MHz)	Return Loss (dB)
10	44.79
100	44.11
1000	37.75
5000	31.94
10000	30.15
15000	27.40
20000	26.43
30000	30.42
40000	31.64

ANNEF-50K+  
RETURN LOSS



#### 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/terms/viewterm.html](http://www.minicircuits.com/terms/viewterm.html)

