

**THE BIG DEAL**

- Ultra-Wideband, DC to 50 GHz
- Excellent Return Loss, 20 dB typ. up to 50 GHz
- Input Power Handling up to 1W
- Mates with 1.85mm, 3.5mm, 2.92mm and SMA Connectors

APPLICATIONS

- Test and Measurement Equipment
- Test Labs
- Defense and Aerospace
- 5G Applications
- Q and V band Communication Links



Generic photo used for illustration purposes only

Model No.	ANNEF-50V+
Case Style	LL2592-1
Connectors	2.4 mm-Female

+RoHS Compliant

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

PRODUCT OVERVIEW

Mini-Circuits' ANNEF-50V+ is an ultra-wideband 50 Ω termination capable of absorbing signals up to 1W from DC to 50 GHz. It provides excellent return loss across its entire operating frequency range, effectively dissipating signal power with minimal reflections. This model has a 2.4 mm-female connector, mechanically compatible with 1.85mm, 3.5mm, 2.92mm and SMA 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 50 GHz	Extremely wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Good Return Loss, 20 dB up to 50 GHz	Good return loss minimizes signal reflections across multiple-decade frequency range.
2.4 mm connector mates with 1.85mm, 3.5mm, 2.92mm and SMA connectors	Provides flexible connection options, avoiding the need for extra adapters.
Power Handling up to 1W	ANNEF-50V+ 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 componentry where heat rise is common.



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Termination

ANNEF-50V+

50Ω DC to 50 GHz 2.4 mm-Female

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	50	GHz
Impedance		50			Ohms
Return Loss	DC - 18	23	41	—	dB
	18 - 35	17	30	—	
	35 - 50	14.8	23	—	
Input Power ¹	DC - 50	—	—	1	W

1. Max. input power at 25°C ambient, derate to 25W at 125°C.

ABSOLUTE MAXIMUM RATINGS¹

Parameter	Ratings
Operating Temperature	-55 °C to +100 °C
Storage Temperature	-55 °C to +100 °C

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





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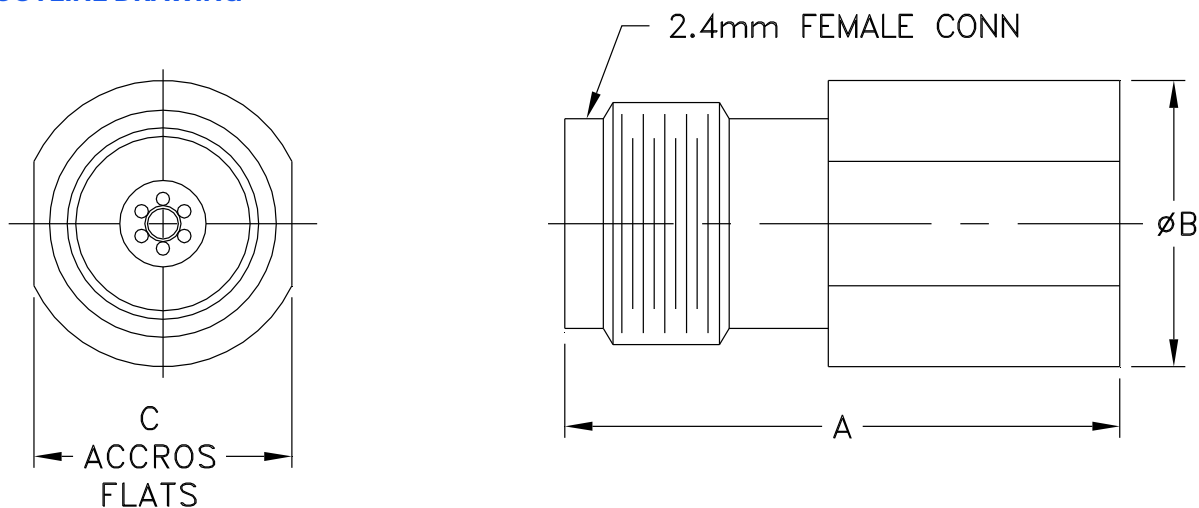
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Termination

ANNEF-50V+

50 Ω DC to 50 GHz 2.4 mm-Female

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inch mm)

A	B	C	D	E	wt
.605	.312	.281	—	—	grams
15.4	7.9	7.1	—	—	4.5



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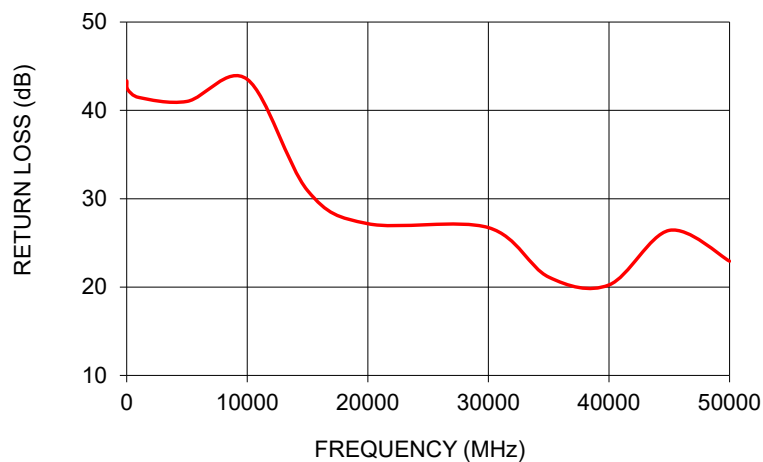
ANNEF-50V+

50Ω DC to 50 GHz 2.4 mm-Female

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Return Loss (dB)
10	43.3
100	42.3
1000	41.5
5000	41.0
10000	43.5
15000	30.9
20000	27.2
30000	26.7
35000	21.1
40000	20.2
45000	26.4
50000	22.9

ANNEF-50V+
RETURN LOSS



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/terms/viewterm.html



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