

### ANNE-50V+

50Ω DC to 50 GHz 2.4 mm-Male

#### **THE BIG DEAL**

- Ultra-Wideband, DC to 50 GHz
- Excellent Return Loss, 28 dB typ. up to 18 GHz; 20 dB typ. up to 50 GHz
- Input Power Handling up to 1W
- Mates with 1.85 mm Connector



Generic photo used for illustration purposes only

Model No.	lel No. ANNE-50V+	
Case Style	se Style LL2539	
Connectors	tors 2.4 mm-Male	

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

#### **APPLICATIONS**

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

### **PRODUCT OVERVIEW**

Mini-Circuits' ANNE-50V+ is an ultra-wideband  $50\Omega$  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 2.4mm-male connector, mechanically compatible with 2.4mm-female and 1.85 mm-female connectors. The unit features rugged construction for a long life of use and comes in a passivated stainless steel case measuring only  $0.67''(l) \times 0.31''$  (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: • 28 dB up to 18 GHz • 20 dB up to 50 GHz	Good return loss minimizes signal reflections across multiple-decade frequency range.
2.44 mm connector mates with 1.85 mm connectors	Provides lexible connection options, avoiding the need for extra adapters.
Power Handling up to 1W	ANNE-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.

REV. A ECO-016342 ANNE-50V+ MCL NY 240116



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#### **ELECTRICAL SPECIFICATIONS AT 25°C**

Parameter	Condition (GHz)	Min.	Тур.	Max.	Unit
Frequency Range		DC	_	50	GHz
Impedance			50		Ohms
	DC - 18	23	28	_	
Return Loss	18 -3 5	17.7	22	_	dB
	35 - 50	14.7	20	_	
Input Power¹	DC - 50	_	_	1	W

<sup>1.</sup> At 25°C, derate linearly to 300 mW at 100°C.

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

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

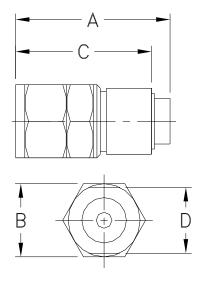
<sup>1.</sup> Permanent damage may occur if any of these limits are exceeded.



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### **OUTLINE DRAWING**



## OUTLINE DIMENSIONS $\binom{lnch}{mm}$

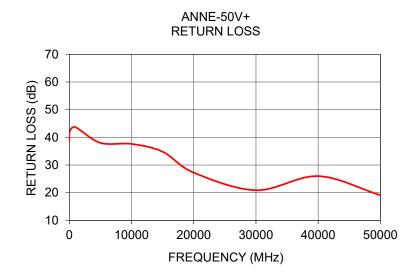
wt	Ε	D	С	В	Α
grams	_	.281	.59	.312	.67
4.4		7.1	15.0	7.9	17.0

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#### **TYPICAL PERFORMANCE DATA**

Frequency (MHz)	Return Loss (dB)
10	38.66
100	42.37
1000	43.66
5000	38.00
10000	37.62
15000	34.80
20000	27.25
30000	20.89
40000	25.98
50000	19.08



#### 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



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