

# Termination

## ANNE-50K+

50Ω 2.92mm DC to 40 GHz

### The Big Deal

- Ultra-wideband, DC to 40 GHz
- Excellent return loss, 35 dB up to 4 GHz; 20 dB up to 40 GHz
- Input power handling up to 1W
- Mates with SMA, K, and 3.5mm connector types



CASE STYLE: LL2699-1

### Product Overview

Mini-Circuits' ANNE-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-male connector, allowing connections with SMA, K and 3.5mm type connectors. The unit features rugged construction for a long life of use and comes in a gold-plated brass case measuring only 0.58" (l) x 0.37" (dia.).

### Key Features

Feature	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: <ul style="list-style-type: none"><li>• 35 dB up to 4000 MHz</li><li>• 20 dB up to 40000 MHz</li></ul>	Good return loss minimizes signal reflections across multiple-decade frequency range.
2.92mm-male connector mates with SMA, K and 3.5mm connectors	Provides flexible connection options, avoiding the need for extra adapters.
Power handling up to 1W	ANNE-50K+ 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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## 2.92 mm

## ANNE-50K+

50Ω DC to 40 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 40000 MHz
- return loss, 35 dB typ. up to 4000 MHz and 20 dB typ. up to 40000 MHz
- rugged construction
- 2.92 mm connector mates with SMA, K, and 3.5 mm connectors

### Applications

- cellular communications
- satellite communications
- test set-up
- defense & radar



Generic photo used for illustration purposes only

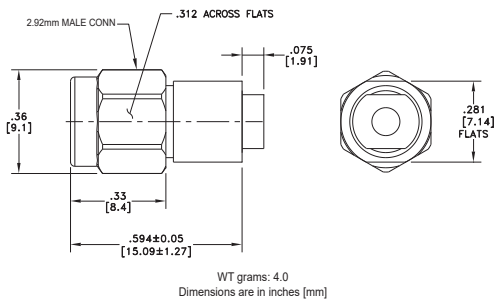
CASE STYLE: LL2699-1

Connector Model  
2.92 mm-M ANNE-50K+

### +RoHS Compliant

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

### Outline Drawing



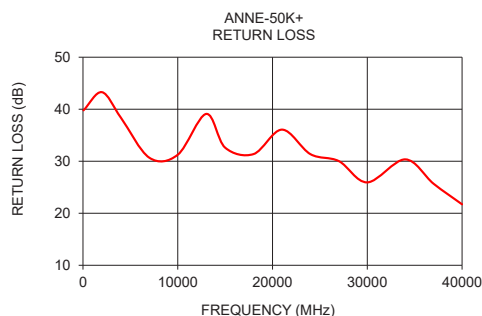
### Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Unit
Frequency Range		DC	—	40	GHz
Impedance			50		Ohms
Return Loss	DC - 4	28	35	—	dB
	4 - 18	20	30	—	
	18 - 30	19	25	—	
	30 - 40	16	20	—	
Input Power <sup>1</sup>	DC - 40	—	—	1	W

1. At 25°C, derate linearly to 350 mW at 100°C.

### Typical Performance Data

Frequency (MHz)	Return Loss (dB)
50	39.78
2000	43.28
4000	38.37
7000	30.68
10000	31.25
13000	39.09
15000	32.61
18000	31.38
21000	36.08
24000	31.36
27000	30.03
30000	25.94
34000	30.36
37000	25.67
40000	21.72



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CH/CP/AM  
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