DC to 20 GHz  $50\Omega$ 

# **The Big Deal**

- Ultra-wideband, DC to 20 GHz
- Excellent return loss, 25 dB typ. up to 20 GHz
- Quick-Turn, 1 to 2 turns



CASE STYLE: LL2699

# **Product Overview**

Mini-Circuits' ANNEQ-50X+ is an ultra-wideband 50Ω quick turn termination that enables quick connect and disconnect in test system which saves time. It provides excellent return loss across its entire operating frequency range, effectively dissipating signal power with minimal reflections.

# **Key Features**

Feature	Advantages
Quick Turn: 1 to 2 turns	Ideal for test application Quick connect/disconnect reduces test time and cost.
Ultra-wideband, DC to 20 GHz	Extremely wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use.
Good return loss: • 35 dB typ up to 4 GHz • 24 dB typ up to 20 GHz	Good return loss minimizes signal reflections across multiple-decade frequency range.
Power handling up to 1W at 25°C	ANNEQ-50X+ meets a wide range of system power requirements.
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.

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.ninicircuits.com/MCLStore/terms.jsp

# ANNEQ-50X+

 $50\Omega$ 

DC to 20 GHz

## **Maximum Ratings**

Operating Temperature -55°C to 100°C -55°C to 100°C Storage Temperature

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

### **Features**

- quick turn, 1 to 2 turns
- wideband coverage, DC to 20 GHz
- return loss, 43 dB typ. up to 4 GHz and 24 dB typ. up to 20 GHz
- rugged construction

# **Applications**

- test and measurement equipment
- · test labs



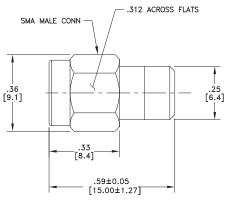
CASE STYLE: LL2699

Connector	Model
SMA-Male Quick-Turn	ANNEO-50X+

+RoHS Compliant

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

## **Outline Drawing**



Wt. grams: 4.0

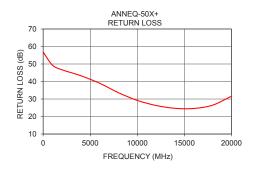
## Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Тур.	Max.	Unit
Frequency Range		DC	_	20	GHz
Impedance			50		Ohms
Determ Lees	DC - 4	32	47	_	dB
Return Loss	4 - 20	22	30	_	
Input Power <sup>1</sup>	DC - 20	_	_	1	W

<sup>1.</sup> To 100  $^{\circ}\text{C},$  derate linearly to 325 mW at 100  $^{\circ}\text{C}.$ 

## **Typical Performance Data**

Frequency (MHz)	Return Loss (dB)	
10	56.9	
100	56.0	
1000	49.3	
2000	46.7	
4000	43.3	
6000	39.0	
8000	33.6	
10000	29.2	
12000	26.3	
14000	24.7	
16000	24.6	
18000	26.5	
20000	31.6	



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