COAXIAL

Termination

ANNE-50W+

50Ω 0.5 W DC to 110 GHz 1.0 mm Male

KEY FEATURES

- Ultra-Wideband, DC to 110 GHz
- Input Power Handling, 0.5 W
- Excellent VSWR, 1.24 typ.

Generic photo used for illustration purposes only

APPLICATIONS

- Optical communications
- Test & Measurement
- High-speed data systems
- Instrumentation
- Precision Measurements

HANDLING INSTRUCTIONS
1.0 mm connectors require specific handling and torque values. See Mini-Circuits Application Note AN-71-001 for detail.

PRODUCT OVERVIEW

The Mini-Circuits ANNE-50W+ is an ultra-wideband 50Ω termination capable of absorbing signals up to 0.5 W from DC to 110 GHz. It provides excellent return loss across its entire operating frequency range, effectively dissipating signal power with minimal reflections. This model has a 1.0 mm male connector, allowing connection with a 1.0 mm female connector.

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC	-	110	GHz
Average Power[1]	-	-	0.5	-	W
VSWR	DC-26.5	-	1.06	1.35	:1
	26.5-40	-	1.14	1.55	
	40-60	-	1.13	1.65	
	60-90	-	1.36	2.10	
	90-110	-	1.49	2.49	

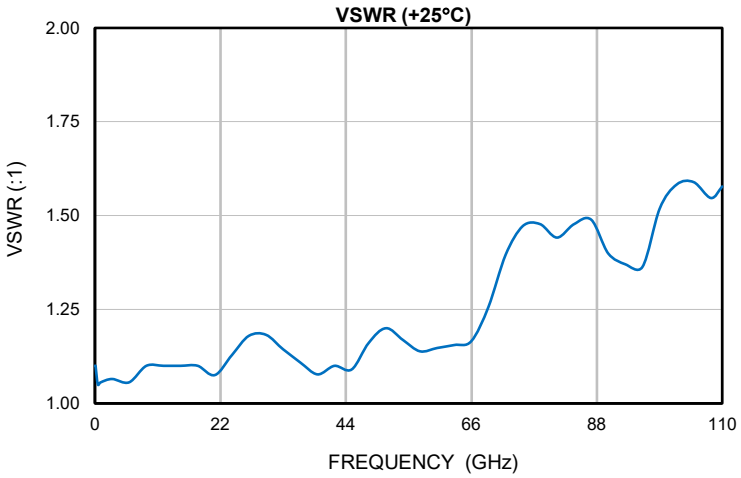
1. Derates linearly to 10% at +100˚C from +25˚C.

ABSOLUTE MAXIMUM RATINGS[2]

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

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

TYPICAL PERFORMANCE GRAPHS



Termination

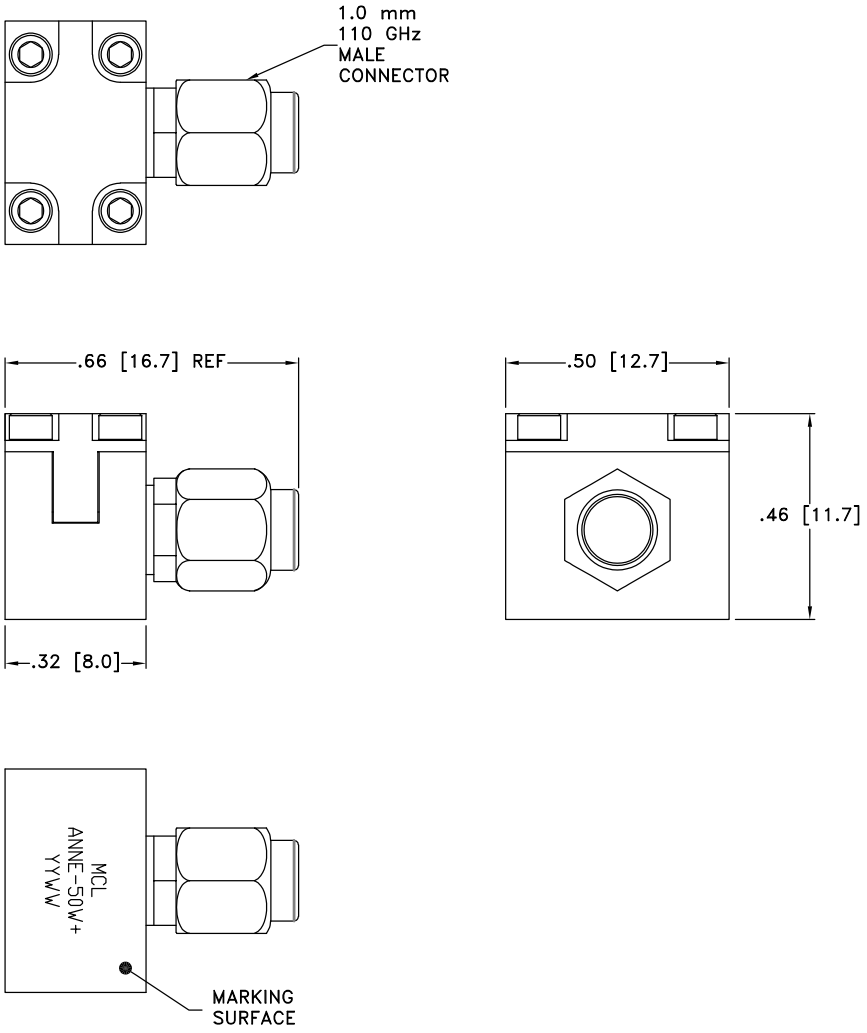
ANNE-50W+

50Ω 0.5 W DC to 110 GHz 1.0 mm Male

COAXIAL CONNECTIONS

Description	RF1 PORT
Connector Type	1.0 mm Male
Orientation	Straight

CASE STYLE DRAWING



Weight: 6.2 grams MAX
Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03[.76]; 3 PL ± .015[.38] inches[mm]

PRODUCT MARKING*: ANNE-50W+

*Marking may contain other features or characters for internal lot control.

Termination

ANNE-50W+

50Ω 0.5 W DC to 110 GHz 1.0 mm Male

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD CLICK HERE

Performance Data & Graphs	Data Graphs S-Parameter (S1P Files) Data Set (.zip file)
Case Style	LL3603
RoHS Status	Compliant
Environmental Ratings	ENV142

NOTES

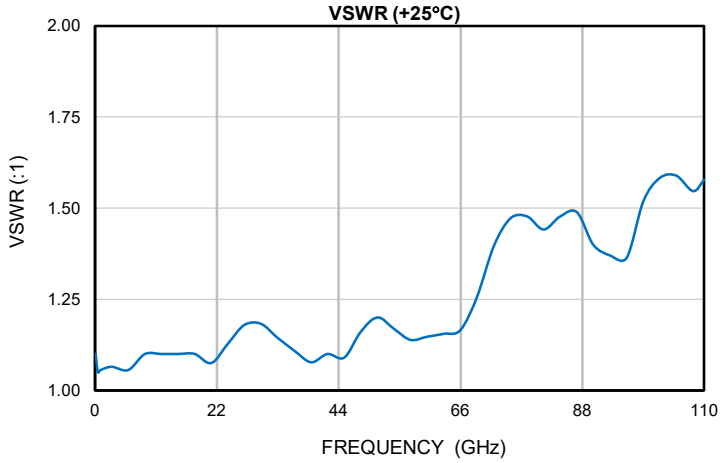
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's 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

50W Termination ANNE-50W+

Typical Performance Data (+25°C)

FREQ.	VSWR
(GHz)	(:1)
0.01	1.1
0.1	1.1
0.5	1.1
1.0	1.1
3.0	1.1
6.0	1.1
9.0	1.1
12.0	1.1
15.0	1.1
18.0	1.1
21.0	1.1
24.0	1.1
27.0	1.2
30.0	1.2
33.0	1.1
36.0	1.1
39.0	1.1
42.0	1.1
45.0	1.1
48.0	1.2
51.0	1.2
54.0	1.2
57.0	1.1
60.0	1.1
63.0	1.2
66.0	1.2
69.0	1.3
72.0	1.4
75.0	1.5
78.0	1.5
81.0	1.4
84.0	1.5
87.0	1.5
90.0	1.4
93.0	1.4
96.0	1.4
99.0	1.5
102.0	1.6
105.0	1.6
108.0	1.5
110.0	1.6

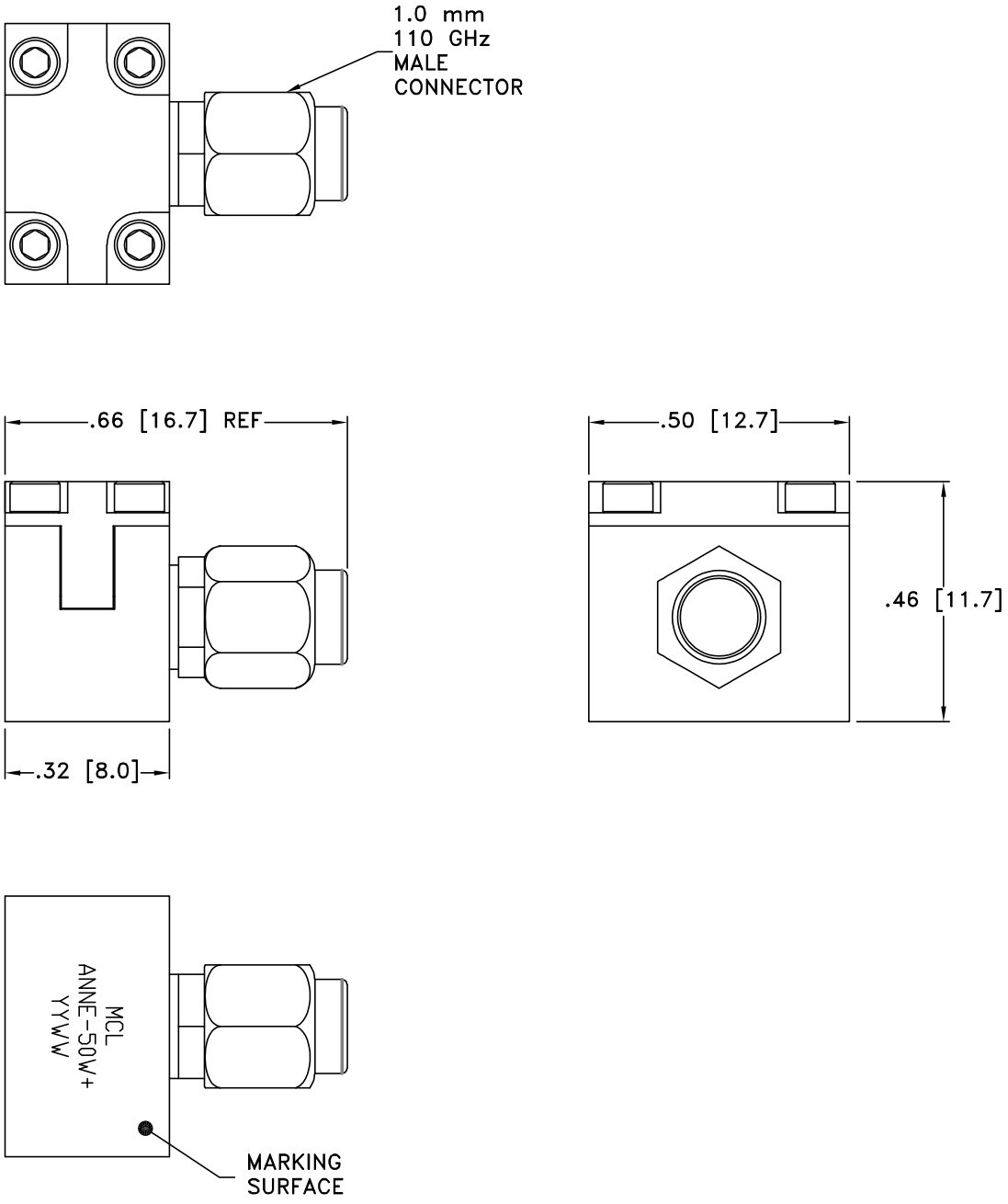
Typical Performance Curves



Case Style LL

Outline Dimensions

LL3603



Weight: 6.2 grams MAX

Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03[.76]; 3 Pl. ± .015[.38] inches[mm]

Notes:

1. Case material: Aluminum.
2. Finish: Chemical Conversion.

Mini-Circuits

Environmental Specifications ENV142

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-55° to 100°C, 5 cycles	MIL-STD-202, Method 107, Condition A except +100°C instead of 85°C
Connector Durability	100 Mating / Unmating Cycles	MIL-PRF-39012E, PARAGRAPH 4.6.12
Burn-In	0.5W for 16 hours	Individual Model Data Sheet