

# Coaxial Amplifier

## ZHL-1-2W+

50Ω High Power 2W 5 to 500 MHz

### Features

- wideband, 5 to 500 MHz
- high power output, +33 dBm min.
- high gain, +29 dB min.
- high IP3, +44 dBm typ.
- good matching VSWR, 1.5:1

### Applications

- VHF/UHF
- instrumentation
- laboratory



ZHL-1-2W+



ZHL-1-2WX+<sup>▲</sup>

Case Style: T35

Connectors	Model No.
BNC	ZHL-1-2W+ (shown)
BNC	ZHL-1-2WX+ (shown)
SMA	ZHL-1-2W-S+
SMA	ZHL-1-2WX-S+
N-TYPE	ZHL-1-2W-N+
N-TYPE	ZHL-1-2WX-N+

### +RoHS Compliant

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

### Electrical Specifications at 25°C

Parameter	Condition (MHz)	ZHL-1-2W+ ZHL-1-2WX+ <sup>▲</sup>			Units
		Min.	Typ.	Max.	
Frequency Range		5	—	500	MHz
Gain	5-500	29	—	—	dB
Gain Flatness	5-500	—	—	±1.0	dB
Output Power at 1dB compression	5-500	+33	—	—	dBm
Noise Figure	5-500	—	7.0	—	dB
Output third order intercept point	5-500	—	+44	—	dBm
Input VSWR	5-500	—	1.5	—	:1
Output VSWR	5-500	—	1.5	—	:1
DC Supply Voltage		—	24	—	V
Supply Current		—	—	0.9	A

Open load is not recommended, potentially can cause damage.  
With no load derate max. input power by 20 dB.

<sup>▲</sup>Heat sink not included. Alternative heat sinking and heat removal must be provided by the user to limit maximum base-plate temperature to 85°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 1.0°C/W max.

### Maximum Ratings

Parameter	Ratings
Operating Temperature	-20°C to 65°C
Storage Temperature	-55°C to 100°C
DC Voltage	+25V
Input RF Power (no damage)	+10 dBm

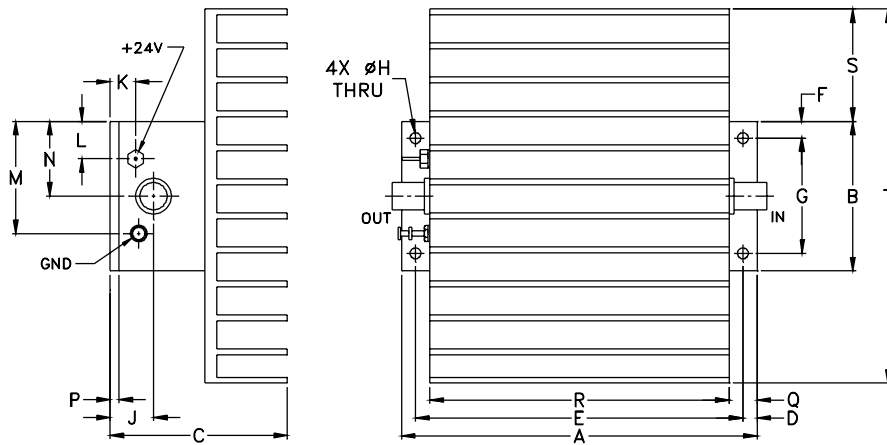
Permanent damage may occur if any of these limits are exceeded.

### Notes

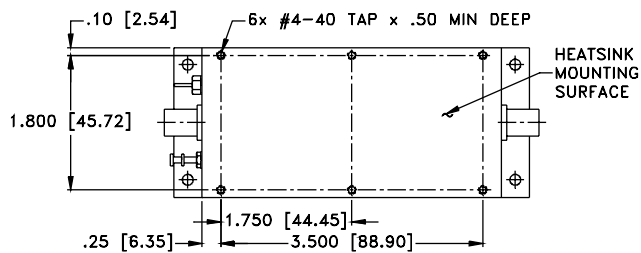
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



## Outline Drawing for models with heatsink



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



## Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt
4.75	2.00	2.37	.19	4.375	.23	1.540	.144	.58	.34	.50	1.50	1.00	.13	.38	4.00	1.50	5.0	grams*
120.65	50.80	60.20	4.83	111.13	5.84	39.12	3.66	14.73	8.64	12.70	38.10	25.40	3.30	9.65	101.60	38.10	127.00	700

\*300 grams without heatsink

### 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)

