

# Coaxial Amplifier

50Ω Medium High Power 10 to 4200 MHz

## ZHL-4240W+

### Features

- wideband, 10 to 4200 MHz
- high IP3, +38 dBm typ.
- high gain, 39 dB min.

### Applications

- communication systems
- cellular
- instrumentation
- laboratory



ZHL-4240WX+

ZHL-4240W+

CASE STYLE: U36

Connectors	Model
SMA	ZHL-4240W+
SMA	ZHL-4240WX+

### +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-4240W+ ▲ZHL-4240WX+			Units
		Min.	Typ.	Max.	
Frequency Range		10	—	4200	MHz
Gain	10-4200	39	42	47	dB
Gain Flatness	10-4200	—	±1.3	±1.8	dB
Output Power at 1dB compression*	10-4200	+28	+30	—	dBm
Output Power at 3dB compression**	10-4200	+29	+31	—	dBm
Noise Figure	10-4200	—	6.0	—	dB
Output third order intercept point	10-4200	—	+38	—	dBm
Input VSWR	10-4200	—	—	2.5	:1
Output VSWR	10-4200	—	—	2.5	:1
DC Supply Voltage		—	15	—	V
Supply Current		—	—	1.0	A

Open load is not recommended, potentially can cause damage.

With no load derate max. input power by 20 dB.

\* +27 dBm at 3700-4200 MHz

\*\* +28 dBm at 3700-4200 MHz

▲Heat sink not included. Alternative heat sinking and heat removal must be provided by the user to limit maximum base-plate temperature to 65°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 1.3°C/W max.

### Maximum Ratings

Parameter	Ratings
Operating Temperature	-20°C to 65°C
Storage Temperature	-55°C to 100°C
DC Voltage	+20V
Input RF Power (no damage)	-5 dBm

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

### 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.

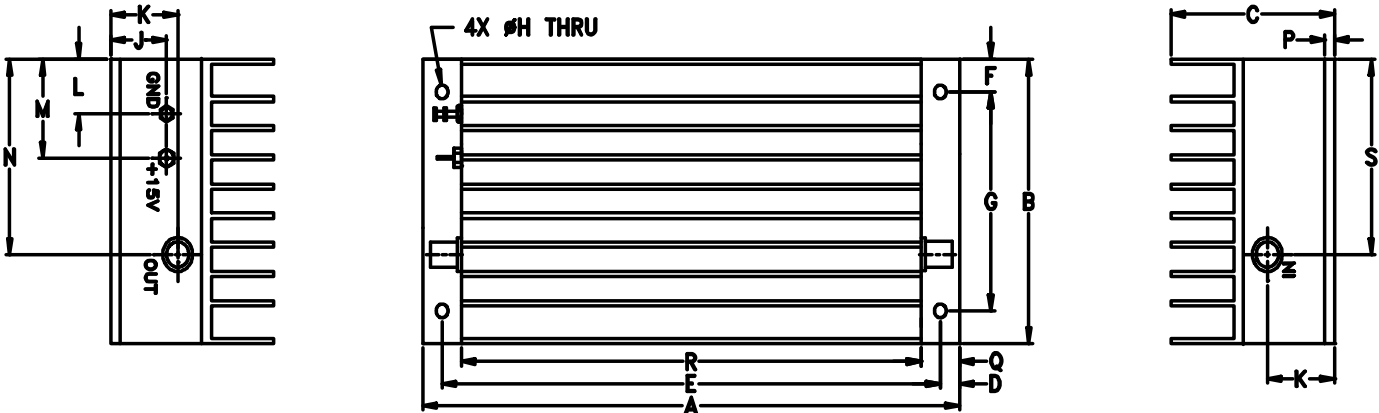
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



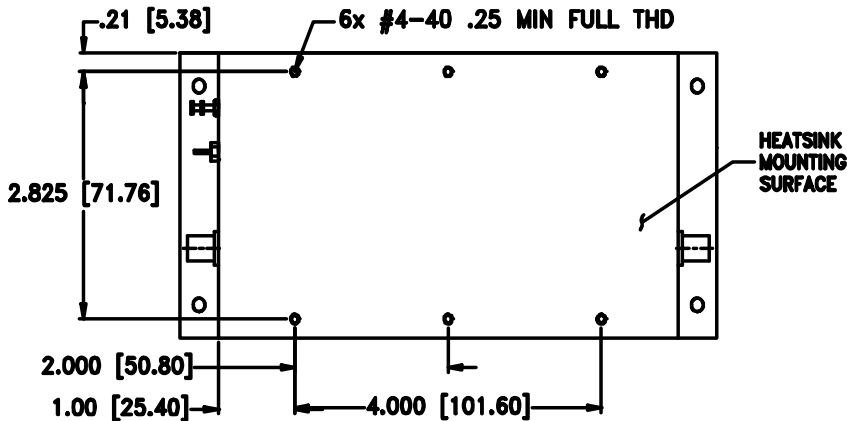
[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 [sales@minicircuits.com](mailto:sales@minicircuits.com)

REV. OR  
M153516  
ZHL-4240W+  
CH/CP/AM  
151026

Outline Drawing for models with heatsink



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



Outline Dimensions (inch mm)

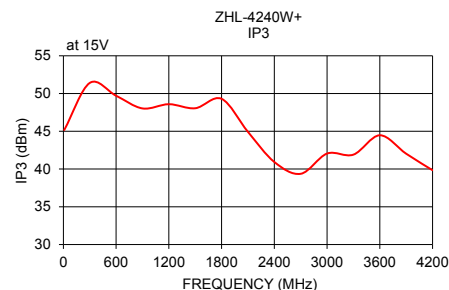
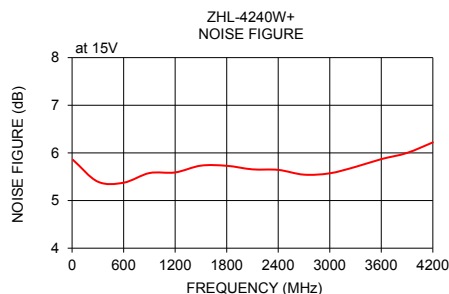
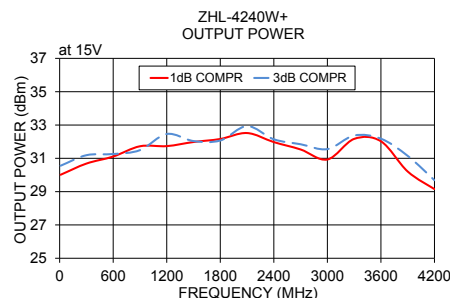
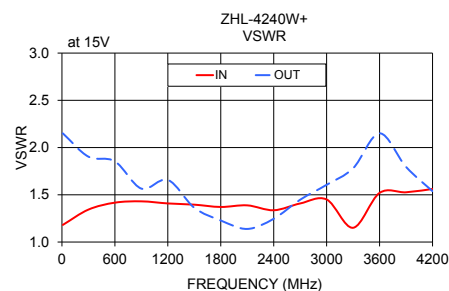
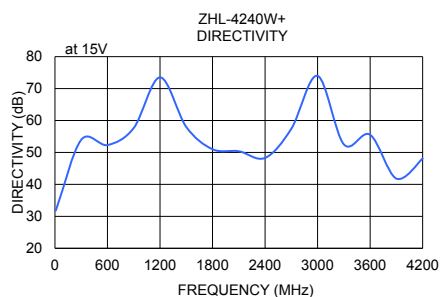
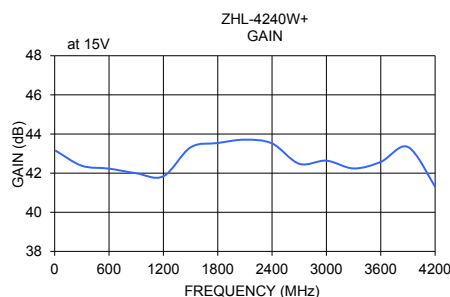
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	wt
7.00	3.25	2.13	.25	6.500	.38	2.500	.156	.73	.88	.63	1.13	2.23	.125	.50	6.00	2.23	grams
177.80	82.55	54.10	6.35	165.10	9.65	63.50	3.96	18.54	22.35	16.00	28.70	56.64	3.18	12.70	152.40	56.64	900

\*600 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)



FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		POUT at 1 dB COMPR. (dBm)	NOISE FIGURE (dB)	IP3 (dBm)
	15V	15V	IN	OUT	15V	15V	15V
10	43.15	31.85	1.18	2.15	30.01	5.85	45.17
300	42.38	53.96	1.34	1.90	30.69	5.40	51.40
600	42.23	52.31	1.42	1.85	31.11	5.37	49.71
900	41.99	57.66	1.43	1.57	31.72	5.58	48.03
1200	41.84	73.51	1.41	1.66	31.73	5.59	48.59
1500	43.32	57.99	1.40	1.36	31.98	5.73	48.05
1800	43.54	51.00	1.37	1.23	32.16	5.73	49.30
2100	43.71	50.38	1.39	1.14	32.52	5.65	44.92
2400	43.52	48.29	1.34	1.25	31.97	5.64	40.93
2700	42.48	57.42	1.41	1.45	31.53	5.54	39.37
3000	42.64	73.99	1.45	1.61	30.93	5.57	42.05
3300	42.24	52.54	1.15	1.78	32.17	5.71	41.91
3600	42.57	55.54	1.52	2.15	32.02	5.87	44.47
3900	43.34	41.82	1.53	1.80	30.21	6.00	42.03
4200	41.30	48.10	1.56	1.54	29.15	6.22	39.84



## 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)



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[ZHL-4240W+](#)