

Coaxial Amplifier

ZHL-4240+

50Ω Medium High Power 700 to 4200 MHz

Features

- wideband, 700 to 4200 MHz
- high IP3, +38 dBm typ.
- high gain, 39 dB min.

Applications

- communication systems
- satellite dist./GPS/PCS
- instrumentation
- laboratory



ZHL-4240X+

ZHL-4240+

CASE STYLE: U36

Connectors	Model
SMA	ZHL-4240+
SMA	ZHL-4240X+

+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-4240+ ▲ZHL-4240X+			Units
		Min.	Typ.	Max.	
Frequency Range		700	—	4200	MHz
Gain	700-4200	39	42	47	dB
Gain Flatness	700-4200	—	±1.3	±1.8	dB
Output Power at 1dB compression*	700-4200	+28	+30	—	dBm
Output Power at 3dB compression**	700-4200	+29	+31	—	dBm
Noise Figure	700-4200	—	8.0	—	dB
Output third order intercept point	700-4200	—	+38	—	dBm
Input VSWR	700-4200	—	—	2.5	:1
Output VSWR	700-4200	—	—	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

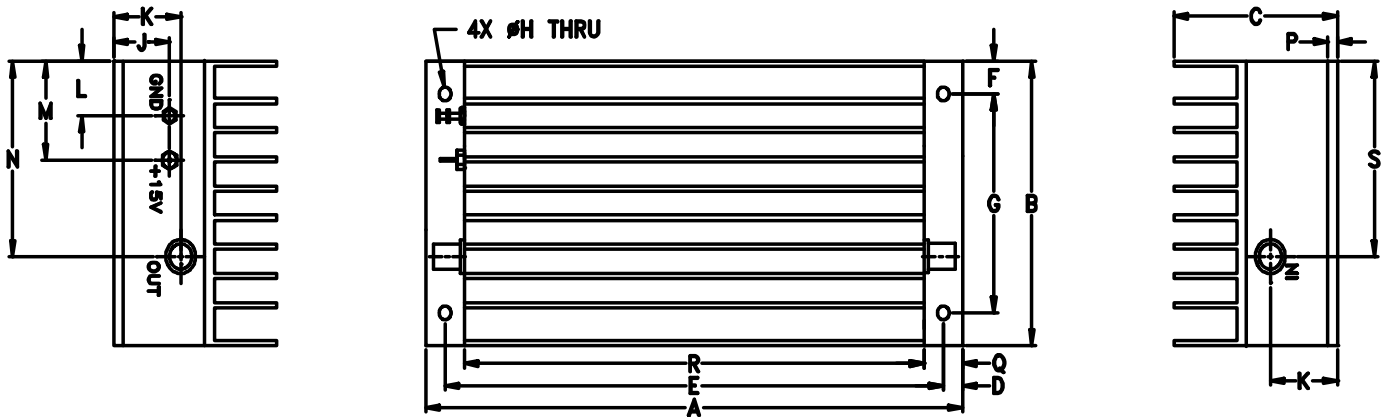
A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

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.

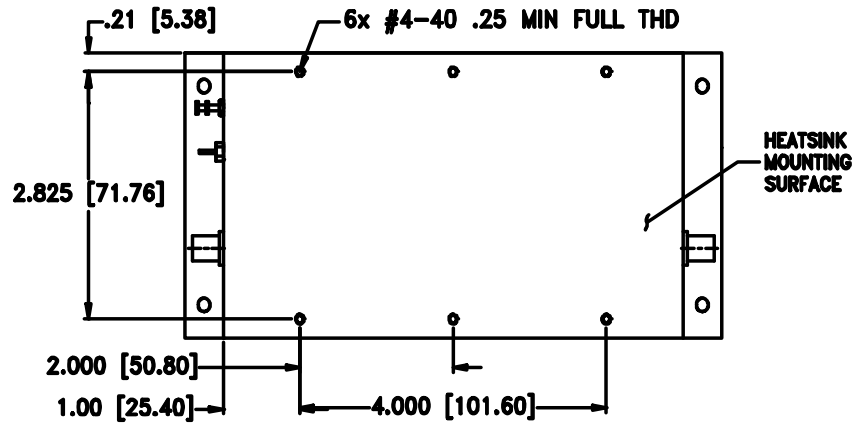
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Outline Drawing for models with heatsink



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



Outline Dimensions (inch / mm)

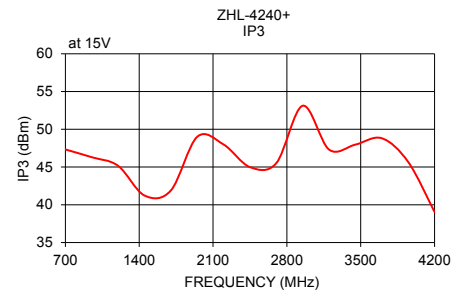
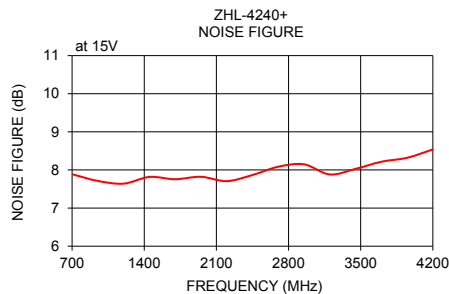
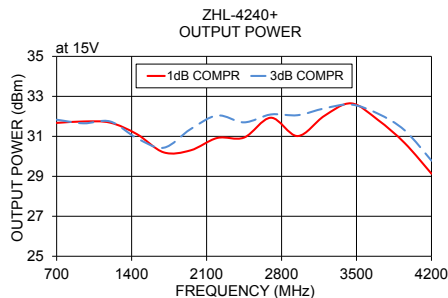
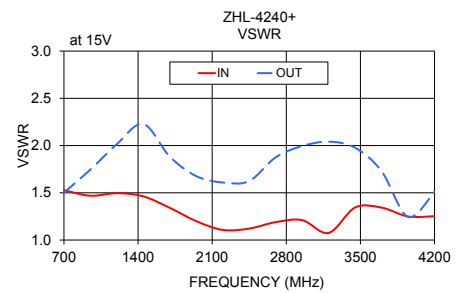
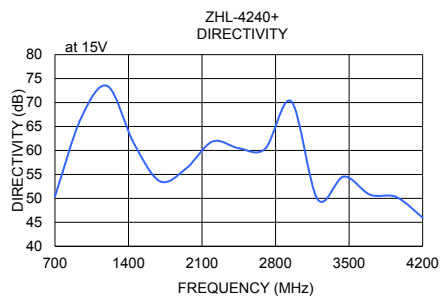
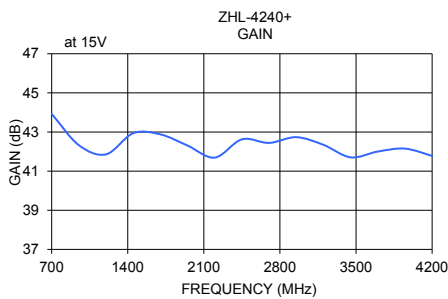
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	wt
7.00	3.25	2.13	.25	6.500	.38	2.500	.156	.73	.88	.63	1.13	2.23	.125	.50	6.00	2.23	grams
177.80	82.55	54.10	6.35	165.10	9.65	63.50	3.96	18.54	22.35	16.00	28.70	56.64	3.18	12.70	152.40	56.64	900

*600 grams without heatsink

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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
700	43.93	50.41	1.53	1.50	31.67	7.89	47.33
950	42.33	66.82	1.47	1.75	31.74	7.71	46.30
1200	41.86	73.44	1.50	2.02	31.68	7.64	45.16
1450	42.94	61.55	1.46	2.23	31.11	7.82	41.23
1700	42.88	53.56	1.34	1.88	30.20	7.76	41.89
1950	42.31	56.25	1.20	1.68	30.30	7.82	49.01
2200	41.69	61.87	1.11	1.61	30.92	7.71	47.98
2450	42.63	60.47	1.12	1.62	30.94	7.87	44.99
2700	42.44	60.33	1.19	1.88	31.93	8.08	45.51
2950	42.74	70.24	1.21	2.00	31.01	8.15	53.12
3200	42.34	49.82	1.08	2.04	32.03	7.88	47.31
3450	41.71	54.55	1.34	1.98	32.65	8.03	47.97
3700	42.00	50.76	1.34	1.73	31.82	8.22	48.81
3950	42.15	50.28	1.25	1.24	30.66	8.32	45.68
4200	41.78	45.95	1.25	1.51	29.13	8.54	39.05



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