

Amplifier

ZHL-ED12238/35

Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability. At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.

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CASE STYLE : BT1165

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C				
Parameter	Min.	Typ.	Max.	Units
Frequency	50		500	MHz
Gain		50		dB
Output Power @1 dB compr.		48.00		dB
Noise Figure		4.0		dB
IP3		55.0		dBm
VSWR	IN	1.60		(:1)
	OUT	2.00		(:1)
DC Power	Voltage	24.0		V
	Current	9.3		A

MAXIMUM RATINGS	
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C

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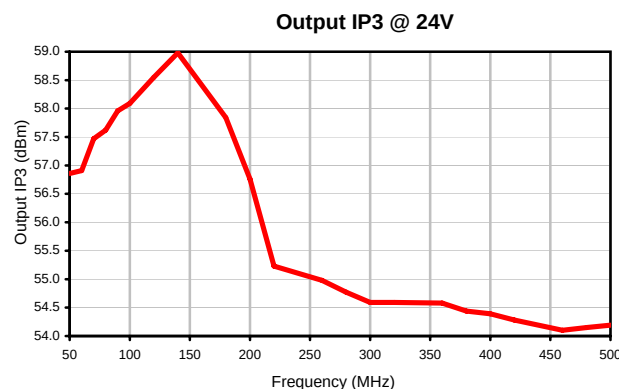
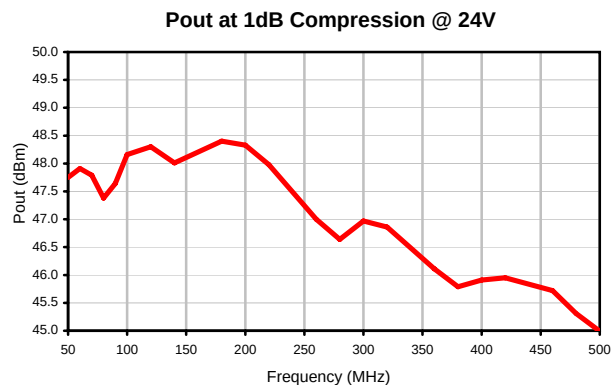
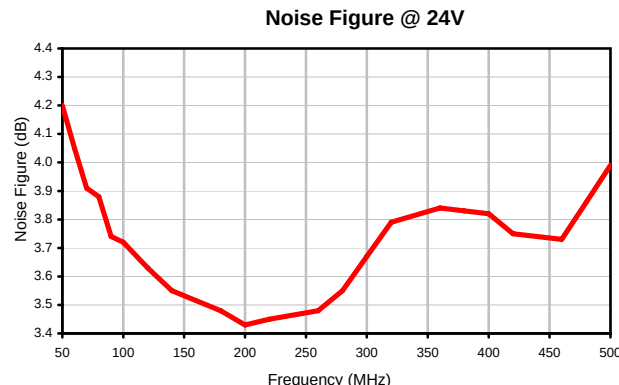
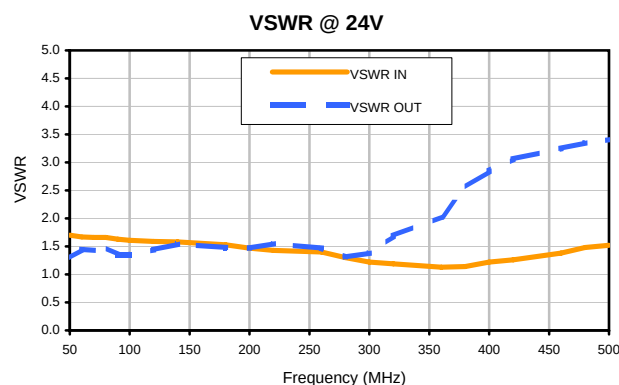
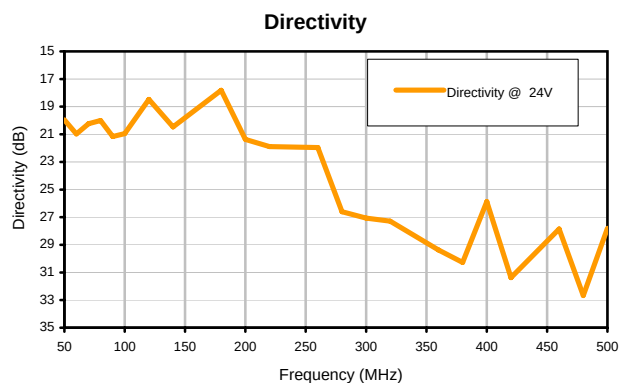
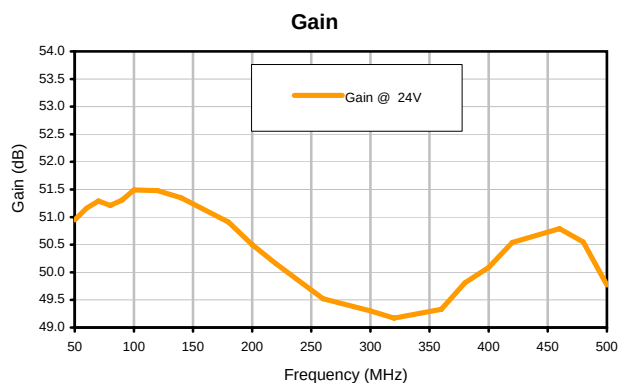
Typical Performance Data

FREQUENCY (MHz)	GAIN (dB) 24V	DIRECTIVITY (dB) 24V	VSWR IN (:1) 24V	VSWR OUT (:1) 24V	NOISE FIGURE (dB) 24V	Pout at 1dB Comp. (dBm) 24V	Output IP3 (dBm) 24V
50.0	50.95	19.96	1.70	1.29	4.2	47.75	56.86
60.0	51.16	20.98	1.67	1.45	4.05	47.91	56.91
70.0	51.29	20.24	1.66	1.43	3.91	47.79	57.47
80.0	51.21	20.00	1.66	1.48	3.88	47.38	57.62
90.0	51.31	21.16	1.63	1.35	3.74	47.64	57.96
100.0	51.49	20.95	1.61	1.35	3.72	48.16	58.09
120.0	51.48	18.47	1.59	1.44	3.63	48.30	58.55
140.0	51.35	20.47	1.58	1.54	3.55	48.01	58.98
180.0	50.91	17.81	1.53	1.48	3.48	48.40	57.84
200.0	50.50	21.37	1.47	1.47	3.43	48.33	56.76
220.0	50.16	21.89	1.43	1.55	3.45	47.98	55.23
260.0	49.52	21.96	1.40	1.47	3.48	47.00	54.98
280.0	49.41	26.60	1.30	1.31	3.55	46.64	54.77
300.0	49.30	27.07	1.22	1.38	3.67	46.97	54.59
320.0	49.17	27.29	1.19	1.69	3.79	46.86	54.59
360.0	49.33	29.37	1.13	2.03	3.84	46.11	54.58
380.0	49.81	30.28	1.14	2.55	3.83	45.79	54.44
400.0	50.09	25.88	1.22	2.85	3.82	45.91	54.39
420.0	50.54	31.38	1.26	3.06	3.75	45.95	54.28
460.0	50.79	27.85	1.38	3.25	3.73	45.72	54.10
480.0	50.55	32.67	1.48	3.35	3.86	45.31	54.15
500.0	49.77	27.81	1.52	3.41	3.99	44.99	54.19

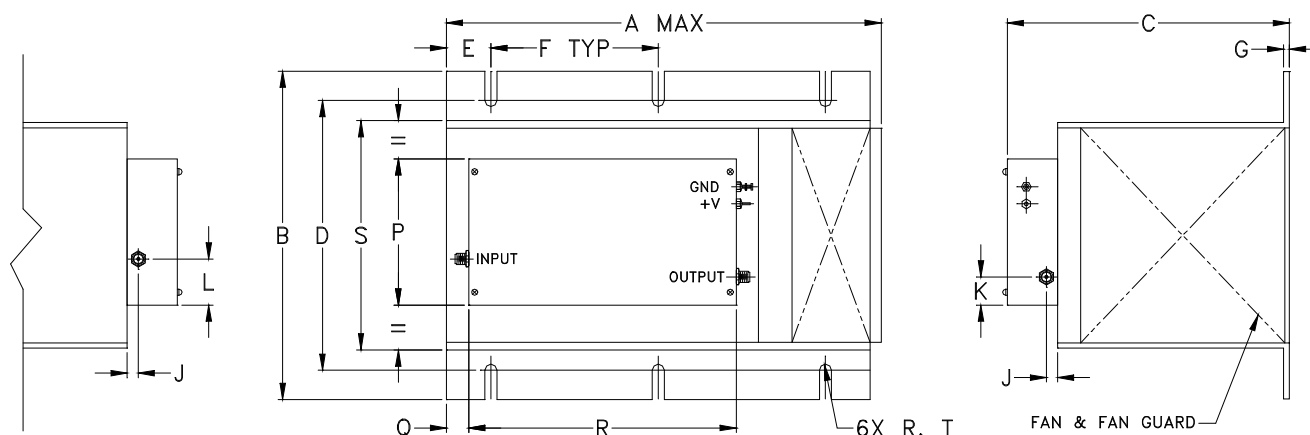
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Typical Performance Curves

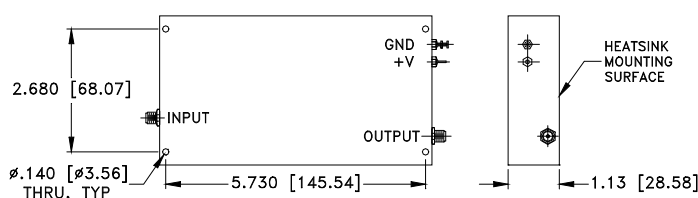
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Outline Dimensions



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK.



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	N
BT1165	9.85 (250.19)	7.3 (185.42)	6.3 (160.02)	6.00 (152.40)	1.00 (25.40)	3.75 (95.25)	.13 (3.30)	- -	.25 (6.35)	.63 (16.00)	1.03 (26.16)	- -	- -

CASE#	P	Q	R	S	T	WT, GRAM	WT WITHOUT HEATSINK, GRAM
BT1165	3.25 (82.55)	.5 (12.70)	6.00 (152.40)	5.1 (129.54)	.135 (3.43)	4185	500

Dimensions are in inches (mm). Tolerances: 1 Pl. $\pm .1$; 2 Pl. $\pm .03$; 3 Pl. $\pm .015$

Notes:

- Case material: Aluminum alloy.
- Finish:
For RoHS Case Styles: Clear Chemical conversion coating, non-chrome or trivalent chrome based.
For non RoHS Case Styles: Yellow Chromate with low electrical Resistance.
- Heatsink finish: Black anodize.
- Refer to the individual model data sheet for the type of connectors available.
- Recommended screws for mounting model without heat sink on 3/32" thick sheet: #6-32, 1.50" Length.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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RF/IF MICROWAVE COMPONENTS



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	-20° to 65° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Stabilization Bake	(non-operating) 125°C, 24 hours	- - -
Burn-in at Elevated Temp.	(DC on) 160 hours at 85° C	MIL-STD-202, Method 108
Thermal Shock	-55° to 100°C, 5 cycles	MIL-STD-202, Method 107, Condition A, except 100°C