



COAXIAL

High Power Amplifier

ZHL-10W-2G+ ZHL-10W-2GX+

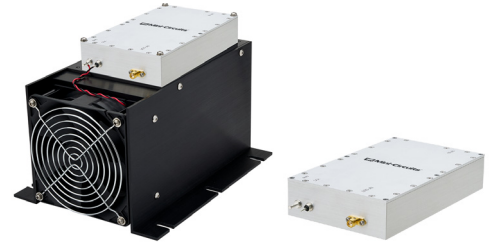
50Ω 10W 800 to 2000 MHz

FEATURES

- High power, 10 Watt
- Low Current consumption, 4A typ.
- High IP3, +50 dBm typ.
- Usable over 700 to 2200 MHz
- No damage with an open or short output load under full CW output power

APPLICATIONS

- Cellular
- PCN
- GSM
- ISM
- Lab Test



Generic photo used for illustration purposes only

Model No.	ZHL-10W-2G+	ZHL-10W-2GX+ [▲]
Case Style	BT1204	
Connectors	SMA	

+RoHS Compliant
 The +Suffix identifies RoHS Compliance.
 See our website for methodologies and qualifications

ELECTRICAL SPECIFICATIONS

Parameter	ZHL-10W-2G+ ZHL-10W-2GX+ [▲]			Units
	Min.	Typ.	Max.	
Frequency Range	800		2000	MHz
Gain	40	43	49	dB
Gain Flatness			±2.0	dB
Output Power at 1dB compression	+39	+40		dBm
Saturated Output Power at 3dB compression	+40	+41		dBm
Noise Figure		7.0		dB
Output third order intercept point		+50		dBm
Input VSWR		1.3		:1
Output VSWR		1.3		:1
DC Supply Voltage		24	28	V
Supply Current ¹			5.0	A

1. Power Supply should be capable of delivering 6A at start up.

[▲] Heat sink and fan not included. Alternative heat sinking and heat removal must be provided by the user to limit maximum base-plate temperature to 75°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 0.08°C/W max.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-20 °C to +65 °C
Storage Temperature	-55 °C to +100 °C
Base Plate Temperature	75 °C
Input RF Power (no damage)	+1 dBm

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





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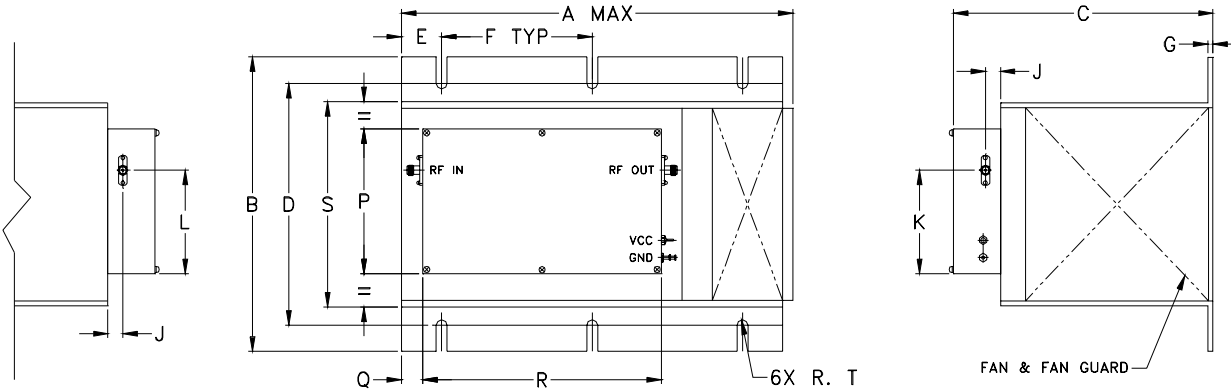
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ZHL-10W-2G+
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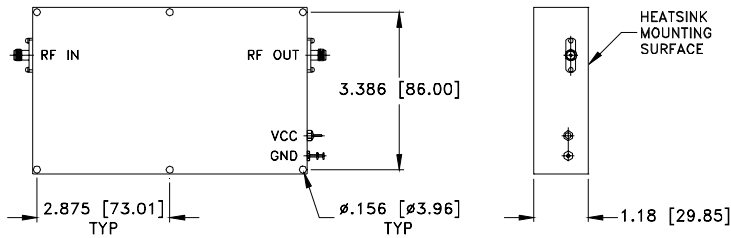
Mini-Circuits

50Ω 10W 800 to 2000 MHz

OUTLINE DRAWING



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
9.85	7.3	6.5	6.00	1.00	3.75	.13	—	.37	2.56	2.56	—	—	3.58	.5	5.95	5.1	.135	grams
250.19	185.42	165.10	152.40	25.40	95.25	3.30	—	9.40	65.02	65.02	—	—	90.93	12.70	151.13	129.54	3.43	4265
																		*580 grams without heatsink



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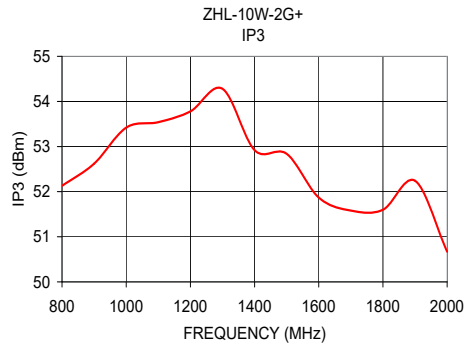
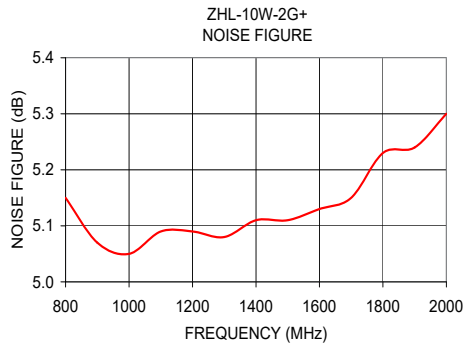
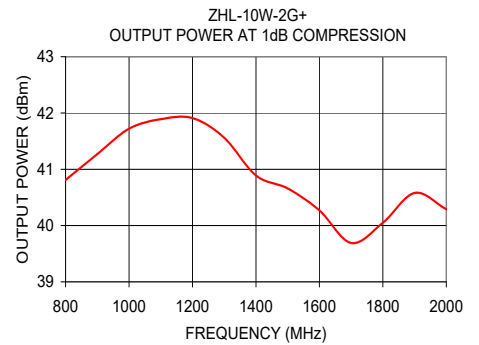
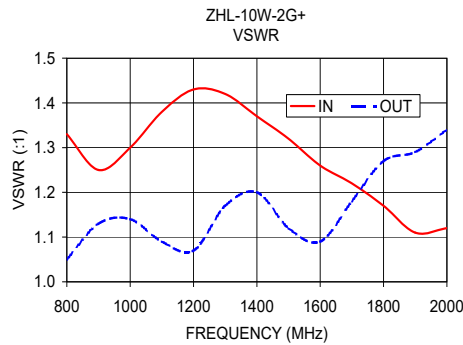
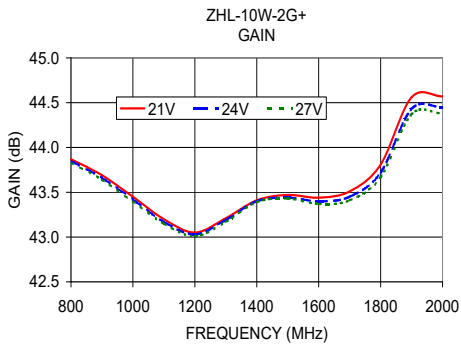
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TYPICAL PERFORMANCE DATA AND CHARTS

Frequency (MHz)	Gain (dB)			VSWR (:1)		Noise Figure (dB)	Pout at 1 dB Compr. (dBm)	IP3 (dBm)
	21V	24V	27V	IN	OUT	24V	24V	24V
800.00	43.87	43.85	43.83	1.33	1.05	5.15	40.81	52.13
900.00	43.69	43.66	43.64	1.25	1.13	5.07	41.27	52.62
1000.00	43.45	43.42	43.40	1.30	1.14	5.05	41.72	53.42
1100.00	43.20	43.17	43.15	1.38	1.09	5.09	41.89	53.54
1200.00	43.05	43.03	43.01	1.43	1.07	5.09	41.91	53.78
1300.00	43.21	43.19	43.17	1.42	1.17	5.08	41.56	54.28
1400.00	43.41	43.40	43.39	1.37	1.20	5.11	40.89	52.92
1500.00	43.47	43.44	43.43	1.32	1.12	5.11	40.66	52.84
1600.00	43.44	43.40	43.37	1.26	1.09	5.13	40.27	51.87
1700.00	43.51	43.45	43.41	1.22	1.18	5.15	39.69	51.58
1800.00	43.81	43.72	43.67	1.17	1.27	5.23	40.05	51.60
1900.00	44.56	44.43	44.37	1.11	1.29	5.24	40.58	52.24
2000.00	44.57	44.45	44.38	1.12	1.34	5.30	40.29	50.67



- 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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