

Coaxial High Power Amplifier

ZHL-30W-252+

50Ω 30W 700 to 2500 MHz

Features

- High power, 30 Watt
- Low Current consumption, 5A typ.
- High IP3, +52 dBm typ.
- Usable over 500 to 2600 MHz
- Good gain flatness, ±1.0 dB typ.
- No damage with an open or short output load under full CW output power
- Shuts off when base plate temperature exceeds +80°C
- Accepts wide range of DC supply voltage +25V to +29V

Applications

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Specifications

Parameter	ZHL-30W-252-S+			ZHL-30W-252X-S+▲			Units
	Min.	Typ.	Max.	Min.	Typ.	Max.	
Frequency Range	700		2500	700		2500	MHz
Gain	45	50	55	45	50	55	dB
Gain Flatness			±2.0			±2.0	dB
Output Power at 1dB compression	+43	+44		+43	+44		dBm
Saturated Output Power at 3dB compression	+44	+46		+44	+46		dBm
Noise Figure		5.5			5.5		dB
Output third order intercept point		+52			+52		dBm
Input VSWR		1.3			1.3		:1
Output VSWR		1.2			1.2		:1
DC Supply Voltage		28	29		28	29	V
Supply Current ¹			6.3			6.0	A

1. Power Supply should be capable of delivering 7.5A at start up.

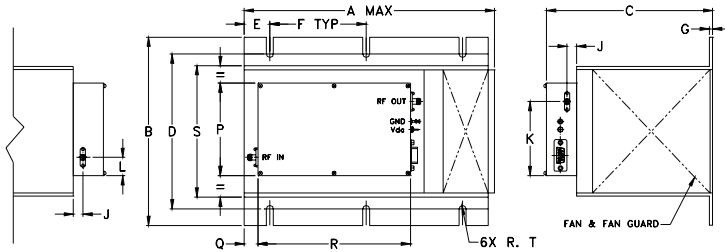
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

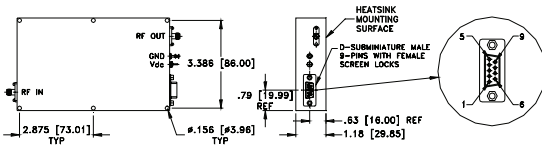


Model No.	ZHL-30W-252-S+	ZHL-30W-252X-S+▲
Case Style	BT1344	
Connectors	SMA / D-Sub Male	
Price (Qty.)	\$2995.00 ea. (1-9)	\$2920.00 ea. (1-9)

Outline Drawing



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	J	K	L	P	Q	R	S	T	wt
9.85	7.3	6.5	6.00	1.00	3.75	.13	.37	2.87	.71	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	72.90	18.03	90.93	12.70	151.13	129.54	3.43	4265

*580 grams without heatsink

Maximum Ratings

Parameter	Ratings
Operating Temperature	-20°C to 60°C
Storage Temperature	-55°C to 100°C
Base Plate Temperature	85°C
Input RF Power (no damage)	0 dBm

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

D-Sub Male Connector Pin Connections**

Pin Function	Label on unit	Pin #	Color	Gauge
None	N/C1, N/C2 N/C4, N/C5	1,2,4,5	None	None
Thermal Shut-Off Indication: Shut-Off: 2 to 5V Not Shut-Off: 0 to 0.8V	TTL Out	3	Orange	26 AWG
DC Input (+)	Vdc	6,7	Red	18 AWG
Ground	GND	8,9	Black	18 AWG

**Each amplifier includes an additional D-Sub connector for mating with the amplifier.

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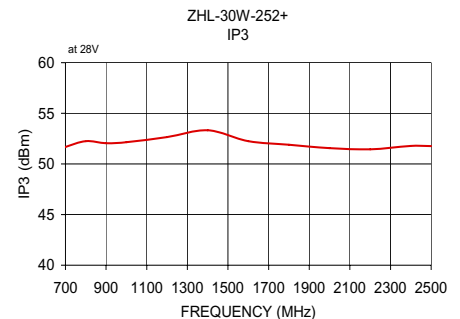
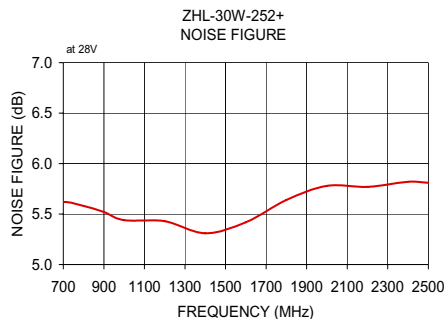
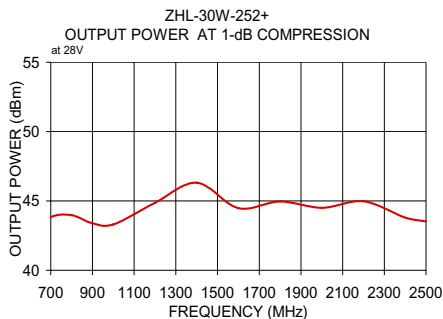
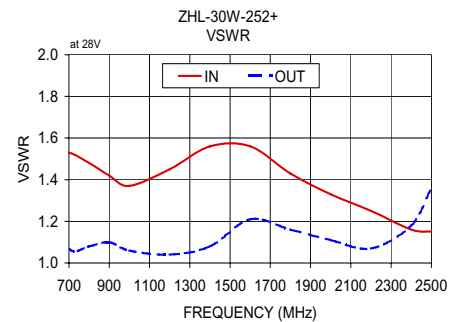
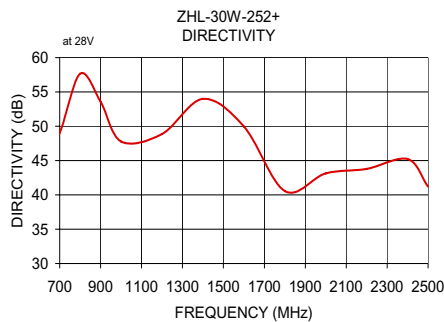
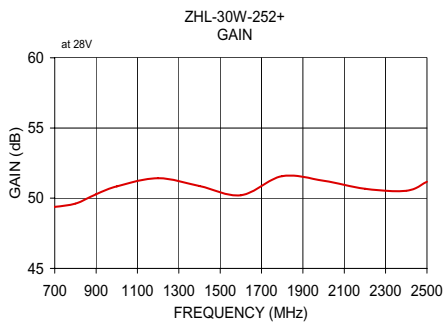
IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	P _{OUT} at 1 dB COMPR. (dBm)	IP ₃ (dBm)
	28V	28V	IN	OUT			
600.00	49.25	43.44	1.53	1.29	5.56	42.48	50.94
700.00	49.38	49.04	1.53	1.07	5.62	43.82	51.67
800.00	49.61	57.64	1.48	1.08	5.58	43.97	52.24
900.00	50.28	53.57	1.42	1.10	5.52	43.39	52.05
1000.00	50.84	47.78	1.37	1.06	5.44	43.30	52.15
1200.00	51.43	48.87	1.45	1.04	5.43	44.86	52.65
1400.00	50.87	54.00	1.56	1.08	5.31	46.31	53.33
1600.00	50.21	49.94	1.56	1.21	5.42	44.48	52.25
1800.00	51.57	40.56	1.43	1.16	5.64	44.96	51.89
2000.00	51.24	43.12	1.33	1.11	5.78	44.51	51.56
2200.00	50.67	43.78	1.25	1.07	5.77	44.98	51.45
2400.00	50.53	45.23	1.16	1.18	5.82	43.80	51.78
2500.00	51.17	41.20	1.15	1.36	5.81	43.53	51.76



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