

Coaxial
Amplifier

50Ω Medium Power 0.0025 to 500 MHz

ZHL-6A+

Features

- wideband, 0.0025 to 500 MHz
- high IP3, +34 dBm typ.
- protected by US Patent, 6,943,629

Applications

- HF/VHF
- communication systems
- UHF TV
- lab use



BNC version shown

CASE STYLE: S32

Connectors	Model
BNC	ZHL-6A+
SMA	ZHL-6A-S+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

MODEL NO.	FREQ. (MHz)		GAIN (dB)			MAXIMUM POWER OUTPUT (dBm)		DYNAMIC RANGE		VSWR (:1) Typ.		DC POWER	
	f _L	f _U	Typ.	Flatness		Min.	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (A) Max.
				Min.	Max.								
ZHL-6A+	0.0025	500	25	21	±1.2	+22	+10	9.5*	+34	1.8	2.0*	24	0.350

Caution! Transient voltage occurring at RF output upon turn-on is approximately 50% of the applied DC power supply voltage. User should protect equipment fed by this amplifier.

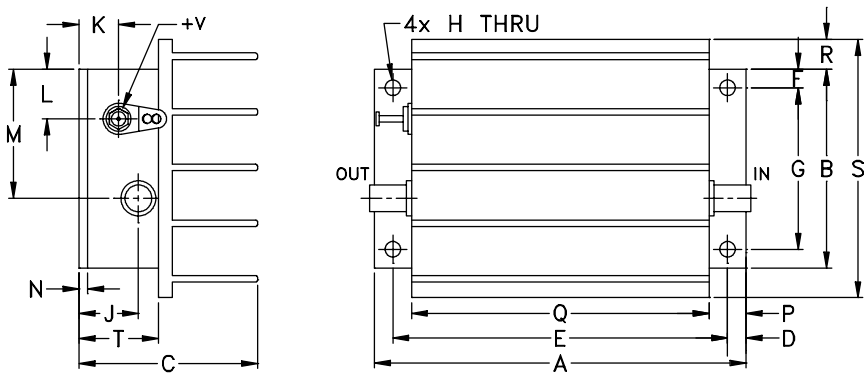
* Noise Figure continually increases from 70 MHz to 10 MHz by approximately 4dB; output VSWR 2.8:1 below 30 MHz
Open load is not recommended, potentially can cause damage. With no load derate max input power by 20 dB

Maximum Ratings

Operating Temperature	-20°C to 65°C
Storage Temperature	-55°C to 100°C
DC Voltage	+24.5V Max.

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

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	wt
3.75	2.00	1.80	.19	3.375	.19	1.625	.144	.50	.40	.50	1.30	.10	.38	3.00	.30	2.60	.80	grams
95.25	50.80	45.72	4.83	85.73	4.83	41.28	3.66	12.70	10.16	12.70	33.02	2.54	9.65	76.20	7.62	66.04	20.32	220.0

Notes

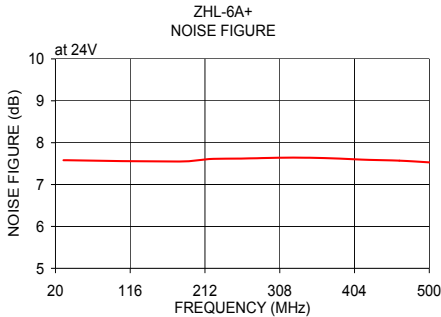
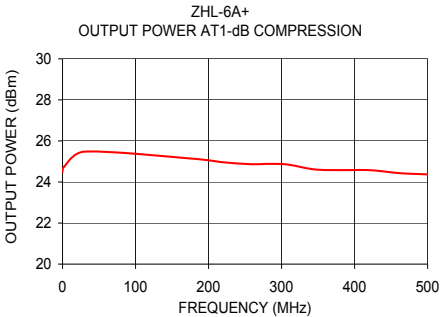
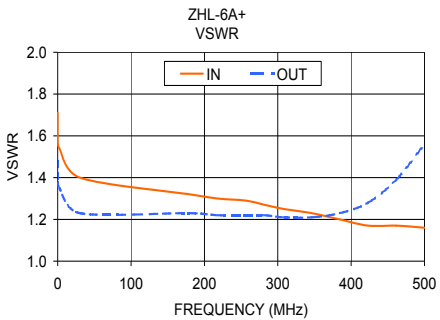
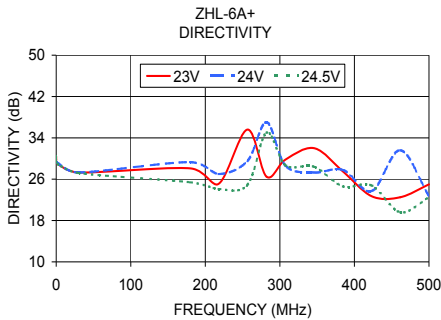
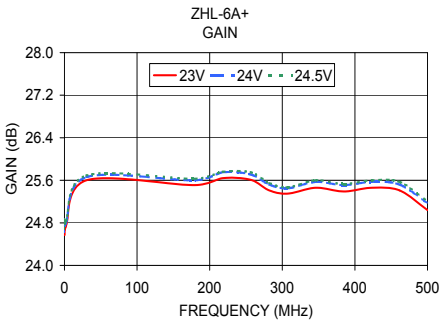
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FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	23V	24V	24.5V	23V	24V	24.5V	IN	OUT		
0.0025	24.57	24.64	24.69	30.40	30.50	30.40	1.71	1.48	—	24.48
0.01	24.73	24.82	24.86	29.80	29.80	29.70	1.57	1.38	—	24.62
0.18	24.67	24.75	24.79	29.30	29.20	29.20	1.56	1.37	—	24.65
2.30	24.75	24.81	24.85	28.90	29.10	28.90	1.54	1.35	—	24.75
30.20	25.60	25.66	25.69	27.30	27.30	27.20	1.40	1.23	7.58	25.48
179.50	25.51	25.60	25.63	28.10	29.30	25.40	1.32	1.23	7.55	25.13
217.90	25.64	25.75	25.76	25.10	27.00	24.10	1.30	1.22	7.61	24.97
256.40	25.61	25.71	25.75	35.60	29.50	24.90	1.29	1.22	7.62	24.87
282.10	25.41	25.52	25.55	26.50	37.00	35.00	1.27	1.22	7.63	24.88
307.70	25.35	25.45	25.47	29.80	28.60	28.70	1.25	1.21	7.64	24.85
346.10	25.46	25.57	25.60	32.00	27.30	28.40	1.23	1.21	7.64	24.61
384.60	25.39	25.51	25.53	27.50	27.80	24.60	1.20	1.23	7.62	24.58
423.10	25.46	25.57	25.60	22.70	23.70	24.80	1.17	1.28	7.59	24.57
461.50	25.41	25.52	25.57	22.50	31.60	19.60	1.17	1.39	7.57	24.43
500.00	25.04	25.17	25.21	25.00	22.70	22.50	1.16	1.56	7.53	24.37



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