

Coaxial Amplifier

ZJL-4HG+

50Ω Medium Power 20 to 4000 MHz

Features

- wideband, 20 to 4000 MHz
- high IP3, +30 dBm typ.
- rugged, compact case 1.07"x0.61" (including mounting bracket)
- protected by US Patent, 6,943,629

Applications

- radar
- instrumentation
- lab use



Generic photo used for illustration purposes only

CASE STYLE: BW459
Connectors Model
SMA ZJL-4HG+

+RoHS Compliant

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

Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)			MAXIMUM POWER (dBm)			DYNAMIC RANGE		VSWR (:1) Typ.		DC POWER	
	f_L	f_U	Typ.	Min. ²	Flatness ¹ Typ.	Output (1 dB Compr.) L_w	U	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
ZJL-4HG+	20	4000	17.0	13.0	±1.5	+15	+10	+13	4.5	+30	1.5	1.4	12	75

1. Flatness specified to 0.75 f_U , dynamic range at 2 GHz.

2. 12.8dB Min. above 3600 MHz

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

L_w = low range (f_L to $f_U/2$)

U= upper range ($f_U/2$ to f_U)

Maximum Ratings

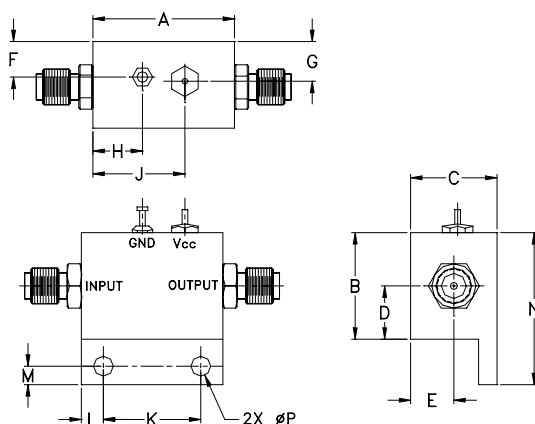
Operating Temperature -40°C to 75°C

Storage Temperature -55°C to 100°C

DC Voltage +13V 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	wt
1.00	.75	.61	.38	.29	.25	.26	.35	.65	.688	.156	.13	1.07	.140	grams
25.40	19.05	15.49	9.65	7.37	6.35	6.60	8.89	16.51	17.48	3.96	3.30	27.18	3.56	25

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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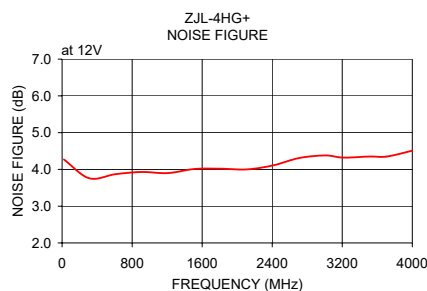
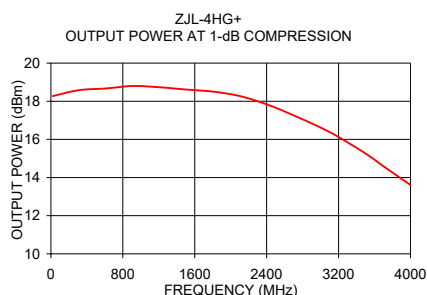
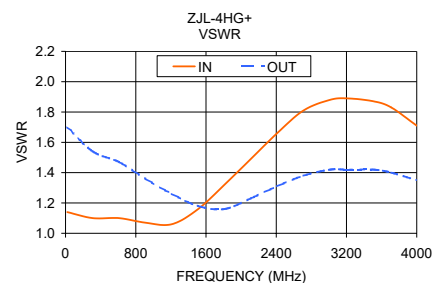
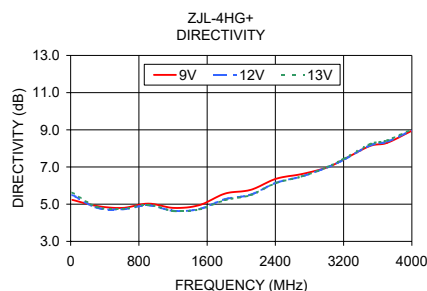
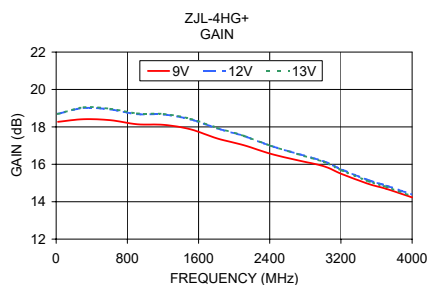
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Typical Performance Data/Curves

ZJL-4HG+

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	9V	12V	13V	9V	12V	13V	IN	OUT		
20.00	18.27	18.70	18.69	5.23	5.50	5.63	1.14	1.70	4.27	18.27
310.00	18.41	19.01	19.05	4.90	4.81	4.85	1.10	1.54	3.76	18.58
610.00	18.36	18.93	18.97	4.80	4.73	4.75	1.10	1.47	3.87	18.67
910.00	18.14	18.68	18.72	5.03	4.94	4.97	1.07	1.36	3.93	18.80
1210.00	18.11	18.66	18.69	4.80	4.64	4.63	1.06	1.26	3.90	18.73
1510.00	17.87	18.40	18.43	4.95	4.74	4.72	1.16	1.18	4.01	18.61
1810.00	17.38	17.92	17.95	5.57	5.27	5.22	1.32	1.16	4.02	18.50
2110.00	17.02	17.51	17.52	5.77	5.51	5.49	1.49	1.23	4.00	18.26
2410.00	16.56	16.99	17.00	6.37	6.15	6.14	1.66	1.31	4.11	17.82
2710.00	16.22	16.57	16.55	6.62	6.49	6.49	1.81	1.38	4.31	17.24
3010.00	15.89	16.15	16.12	6.98	6.98	7.00	1.88	1.42	4.38	16.60
3210.00	15.48	15.72	15.67	7.43	7.41	7.46	1.89	1.42	4.32	16.10
3510.00	14.95	15.15	15.09	8.13	8.16	8.23	1.87	1.42	4.35	15.23
3710.00	14.69	14.86	14.79	8.30	8.36	8.43	1.83	1.40	4.35	14.56
4000.00	14.23	14.38	14.30	8.95	8.97	9.03	1.71	1.35	4.51	13.61



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