

# 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. <sup>2</sup>	Flatness <sup>1</sup> 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

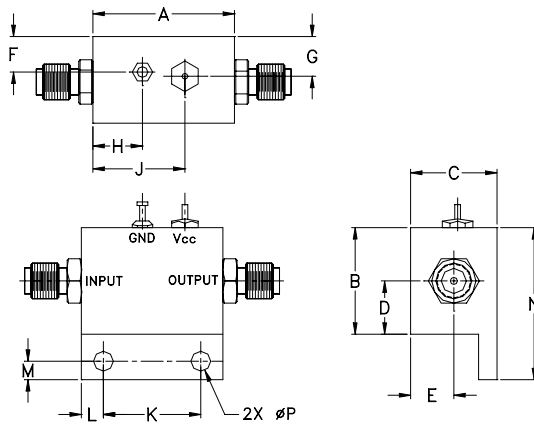
Operating Temperature -40°C to 75°C

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.

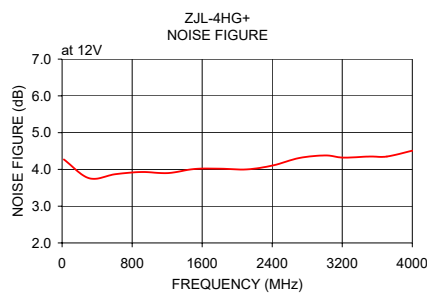
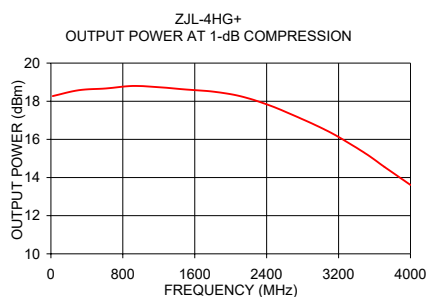
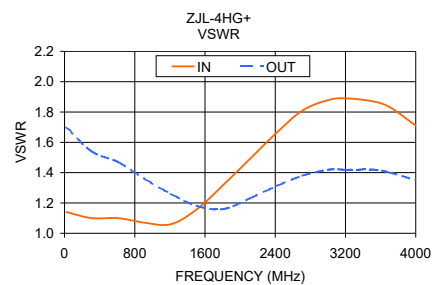
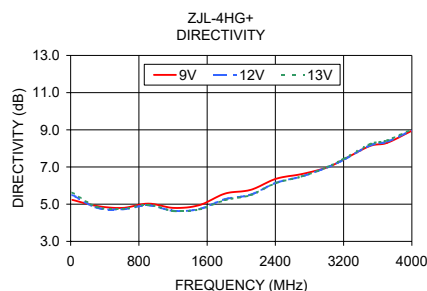
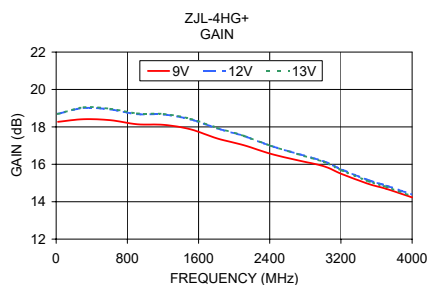
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FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	9V	12V	13V	9V	12V	13V	IN	OUT		
20.00	18.27	18.70	18.69	5.23	5.50	5.63	1.14	1.70	4.27	18.27
310.00	18.41	19.01	19.05	4.90	4.81	4.85	1.10	1.54	3.76	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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