

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



CASE STYLE: BW459

Connectors	Model	Price	Qty.
SMA	ZJL-4HG+	\$129.95 ea.	(1-9)

+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 ¹ RANGE		VSWR (:1) Typ.		DC POWER	
	f _L	f _U	Typ.	Min. ²	Flatness ¹ Typ.	Min 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	±2.0	+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

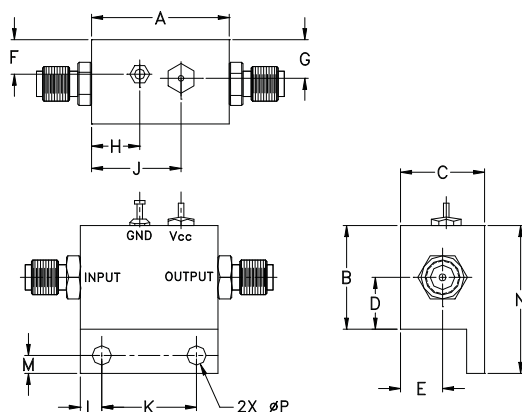
Operating Temperature -40°C to 75°C

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



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IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

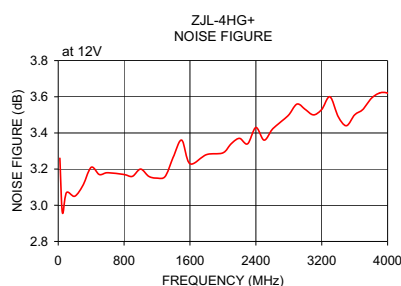
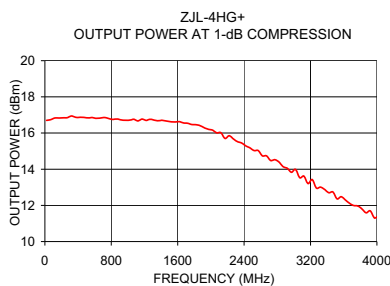
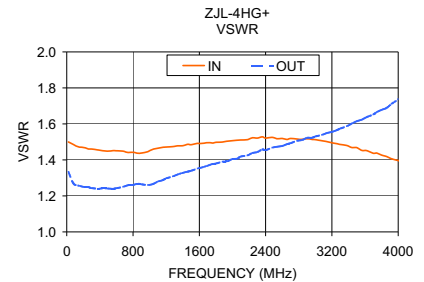
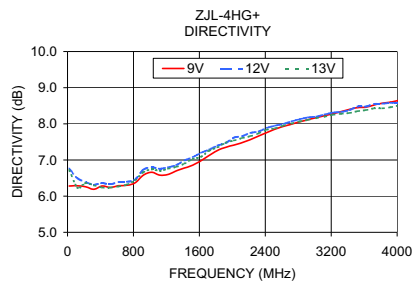
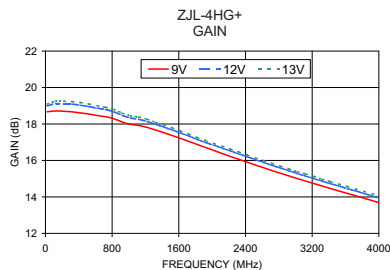
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

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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	18.67	18.99	19.09	6.28	6.76	6.72	1.50	1.33	3.26	16.70
300.00	18.67	19.10	19.23	6.24	6.28	6.25	1.46	1.24	3.11	16.85
600.00	18.47	18.88	19.01	6.28	6.42	6.31	1.45	1.24	3.18	16.83
900.00	18.15	18.53	18.65	6.51	6.65	6.59	1.44	1.26	3.16	16.75
1200.00	17.83	18.17	18.28	6.60	6.80	6.73	1.47	1.30	3.15	16.76
1500.00	17.41	17.71	17.82	6.84	7.07	6.97	1.48	1.34	3.36	16.68
1800.00	16.90	17.19	17.30	7.20	7.40	7.37	1.50	1.38	3.28	16.48
2100.00	16.42	16.71	16.81	7.47	7.65	7.59	1.51	1.42	3.34	16.01
2400.00	15.94	16.24	16.32	7.77	7.89	7.81	1.52	1.45	3.43	15.18
2700.00	15.48	15.77	15.86	8.00	8.02	7.99	1.52	1.49	3.46	14.71
3000.00	15.04	15.32	15.42	8.14	8.21	8.14	1.51	1.53	3.53	13.96
3200.00	14.76	15.04	15.14	8.27	8.33	8.23	1.49	1.56	3.53	13.34
3500.00	14.36	14.63	14.74	8.41	8.44	8.34	1.47	1.62	3.44	12.39
3700.00	14.09	14.36	14.47	8.53	8.51	8.41	1.44	1.65	3.53	12.22
4000.00	13.69	13.95	14.07	8.63	8.62	8.51	1.40	1.74	3.62	11.58



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