

# Coaxial Amplifier

50Ω Low Power 20 to 6000 MHz

**ZJL-6G+**  
**ZJL-6G**

## Features

- ultra wideband, 20 to 6000 MHz
- compact rugged case, 1.07"x 0.61" (including mounting bracket)
- protected by US Patent, 6,943,629

## Applications

- communications systems
- radar
- instrumentation
- laboratory use



CASE STYLE: BW459

Connectors	Model	Price	Qty.
SMA	ZJL-6G(+)	\$114.95	(1-9)

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

*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.	Flatness <sup>1</sup> Typ.	Output (1 dB Compr.)		Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
ZJL-6G(+)	20	6000	13	10	±1.6	+9	+10	+15	4.5	+24	1.5	1.4	12	50

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

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

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

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

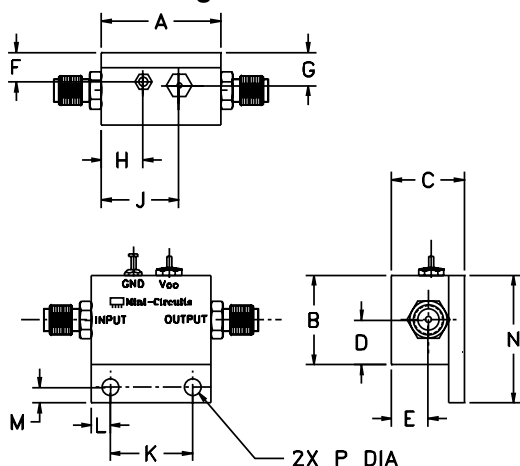
## Maximum Ratings

Operating Temperature -40°C to 75°C

Storage Temperature -55°C to 100°C

DC Voltage +13V Max.

## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.00	.75	.61	.38	.29	.25	.26	.35
25.40	19.05	15.49	9.65	7.37	6.35	6.60	8.89
J	K	L	M	N	P	wt	
.65	.688	.156	.13	1.07	.140	grams	
16.51	17.48	3.96	3.30	27.18	3.56	25	

# Typical Performance Data/Curves

## ZJL-6G+ ZJL-6G

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	14.03	14.80	14.90	4.98	4.94	4.94	1.40	1.72	4.36	13.17
470.00	14.06	14.84	14.94	4.90	4.82	4.83	1.37	1.64	4.20	13.31
920.00	13.68	14.39	14.48	5.42	5.37	5.39	1.33	1.56	4.30	13.35
1370.00	13.71	14.38	14.46	5.08	4.99	4.98	1.29	1.47	4.13	13.34
1820.00	13.57	14.28	14.37	5.10	4.83	4.78	1.21	1.36	4.16	13.26
2120.00	13.42	14.10	14.19	5.19	4.96	4.89	1.17	1.29	4.21	13.21
2570.00	12.98	13.62	13.69	5.84	5.55	5.48	1.16	1.24	4.35	13.20
3020.00	12.65	13.16	13.21	6.20	6.09	6.05	1.19	1.27	4.33	13.24
3470.00	12.32	12.81	12.86	6.55	6.36	6.33	1.23	1.34	4.47	13.52
3920.00	11.78	12.19	12.21	7.55	7.40	7.40	1.26	1.40	4.41	13.51
4220.00	11.74	12.15	12.18	7.62	7.49	7.46	1.26	1.42	4.45	13.61
4820.00	11.50	11.82	11.81	8.38	8.29	8.30	1.25	1.47	4.80	13.21
5120.00	11.58	11.88	11.86	9.05	8.98	8.95	1.18	1.53	4.88	12.80
5570.00	10.90	11.14	11.12	9.40	9.27	9.30	1.20	1.42	4.96	12.39
6000.00	10.48	10.71	10.69	9.76	9.64	9.67	1.28	1.40	5.03	12.04

