

Coaxial Amplifier

ZJL-6G+ ZJL-6G

50Ω Low Power 20 to 6000 MHz

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 ¹ 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

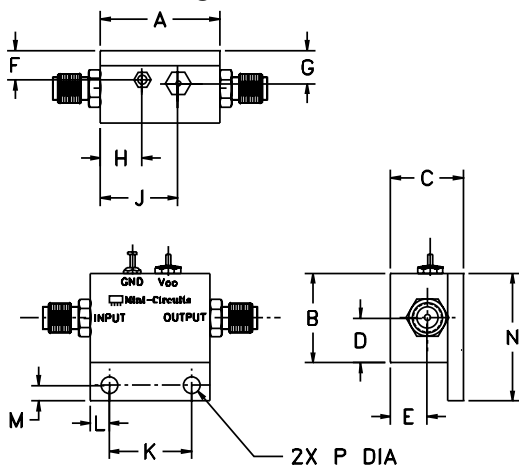
L= low range (f_L to $f_U/2$)

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 |

