

Coaxial Amplifier

ZRON-8G+

50Ω Medium Power 2000 to 8000 MHz

Features

- wideband, 2000 to 8000 MHz
- unconditionally stable
- high IP3, +30 dBm typ.

Applications

- optical and spread-spectrum communications
- line-of-site transmit/receive
- wideband test instrumentation



| Connectors | Model |
|------------|-----------|
| SMA | ZRON-8G+ |
| SMA | ZRON-8GX+ |

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

Electrical Specifications

| MODEL NO. | FREQUENCY (MHz) | | GAIN (dB) | | MAXIMUM POWER (dBm) | | DYNAMIC RANGE | | VSWR (:1) Typ. | | DC POWER | |
|------------|-----------------|-------|-----------|----------------------------|----------------------|-------------------|---------------|----------------|----------------|-----|---------------|-------------------|
| | f_L | f_U | Min. | Flatness ¹ Max. | Output (1 dB Compr.) | Input (no damage) | NF (dB) Typ. | IP3 (dBm) Typ. | In | Out | Volt (V) Nom. | Current (mA) Max. |
| ZRON-8G+ | 2000 | 8000 | 20 | ±1.5 | +20 | +10 | 6.0 | +30 | 2.0 | 2.0 | 15 | 310 |
| ZRON-8GX+* | 2000 | 8000 | 20 | ±1.5 | +20 | +10 | 6.0 | +30 | 2.0 | 2.0 | 15 | 310 |

* Heat sink not included

¹ Measured at 25°C

Open load is not recommended, potentially can cause damage. With no load derate max input power by 20 dB

To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum base-plate temperature to 71°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 5°C/W Max.

Maximum Ratings

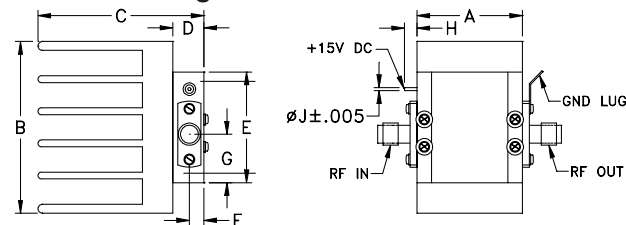
Operating Temperature, case 0°C to 60°C

Storage Temperature -55°C to 125°C

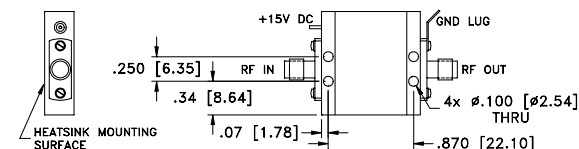
DC Voltage +18V Max.

Permanent damage may occur if any of these limits are exceeded.

Outline Drawing



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G | H | J | wt |
|-------|-------|-------|------|-------|------|-------|------|------|--------|
| 1.01 | 1.63 | 1.64 | .35 | 1.05 | .14 | .46 | .12 | .030 | grams* |
| 25.65 | 41.40 | 41.66 | 8.89 | 26.67 | 3.56 | 11.68 | 3.05 | 0.76 | 58 |

*17 grams without heatsink

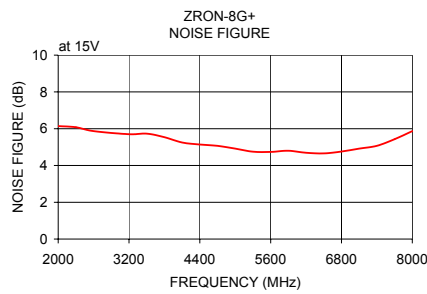
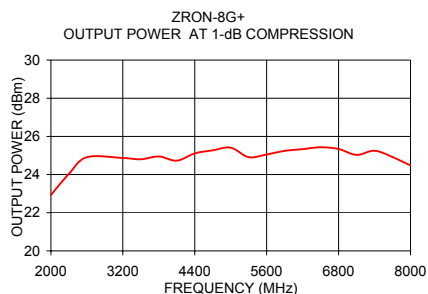
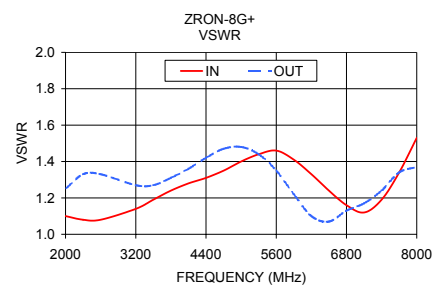
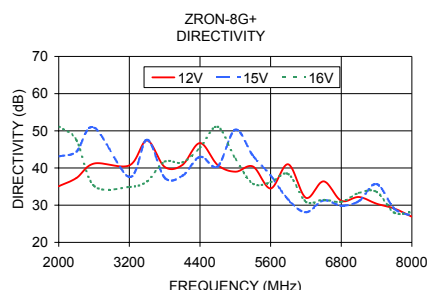
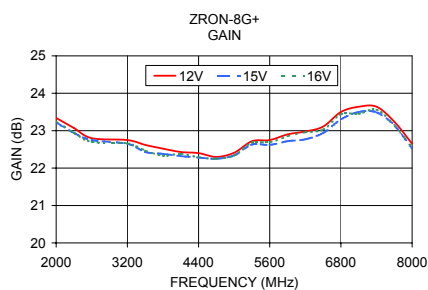
Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document 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

REV. F
M151107
ZRON-8G+
ED-2161
151005



| FREQUENCY (MHz) | GAIN (dB) | | | DIRECTIVITY (dB) | | | VSWR (:1) | | NOISE FIGURE (dB) | POUT at 1 dB COMPR. (dBm) |
|-----------------|-----------|-------|-------|------------------|-------|-------|-----------|------|-------------------|---------------------------|
| | 12V | 15V | 16V | 12V | 15V | 16V | IN | OUT | | |
| 2000.00 | 23.34 | 23.22 | 23.25 | 35.10 | 43.10 | 51.20 | 1.10 | 1.25 | 6.14 | 22.93 |
| 2300.00 | 23.07 | 22.94 | 22.94 | 37.30 | 44.40 | 47.50 | 1.08 | 1.33 | 6.08 | 24.04 |
| 2600.00 | 22.80 | 22.75 | 22.70 | 41.20 | 50.90 | 35.20 | 1.08 | 1.33 | 5.87 | 24.91 |
| 3200.00 | 22.75 | 22.65 | 22.66 | 40.70 | 37.60 | 34.90 | 1.14 | 1.27 | 5.70 | 24.87 |
| 3500.00 | 22.62 | 22.43 | 22.47 | 47.40 | 47.60 | 36.40 | 1.19 | 1.27 | 5.73 | 24.80 |
| 3800.00 | 22.52 | 22.38 | 22.33 | 40.30 | 37.40 | 41.70 | 1.24 | 1.31 | 5.54 | 24.95 |
| 4100.00 | 22.43 | 22.32 | 22.38 | 40.80 | 37.90 | 41.50 | 1.28 | 1.36 | 5.25 | 24.73 |
| 4400.00 | 22.40 | 22.28 | 22.29 | 46.70 | 43.00 | 45.50 | 1.31 | 1.42 | 5.14 | 25.11 |
| 4700.00 | 22.30 | 22.25 | 22.25 | 40.80 | 40.40 | 51.10 | 1.35 | 1.47 | 5.07 | 25.27 |
| 5000.00 | 22.41 | 22.34 | 22.34 | 39.00 | 50.30 | 42.50 | 1.40 | 1.48 | 4.92 | 25.41 |
| 5300.00 | 22.72 | 22.63 | 22.68 | 40.40 | 43.30 | 35.80 | 1.44 | 1.44 | 4.75 | 24.91 |
| 5600.00 | 22.75 | 22.62 | 22.69 | 34.50 | 38.00 | 36.20 | 1.46 | 1.35 | 4.74 | 25.05 |
| 5900.00 | 22.90 | 22.72 | 22.85 | 41.00 | 31.50 | 38.40 | 1.41 | 1.22 | 4.80 | 25.24 |
| 6200.00 | 22.98 | 22.77 | 22.96 | 32.00 | 28.10 | 30.90 | 1.33 | 1.10 | 4.69 | 25.33 |
| 6500.00 | 23.11 | 22.94 | 23.03 | 36.40 | 31.30 | 31.50 | 1.24 | 1.07 | 4.66 | 25.43 |
| 6800.00 | 23.50 | 23.30 | 23.44 | 31.20 | 29.90 | 30.90 | 1.16 | 1.13 | 4.76 | 25.34 |
| 7100.00 | 23.64 | 23.50 | 23.45 | 32.20 | 31.10 | 33.30 | 1.12 | 1.17 | 4.92 | 25.03 |
| 7400.00 | 23.64 | 23.49 | 23.56 | 30.40 | 35.70 | 33.60 | 1.19 | 1.24 | 5.07 | 25.25 |
| 7700.00 | 23.24 | 23.14 | 23.14 | 29.10 | 29.10 | 28.00 | 1.34 | 1.34 | 5.43 | 24.92 |
| 8000.00 | 22.65 | 22.52 | 22.55 | 26.90 | 27.10 | 28.10 | 1.53 | 1.37 | 5.87 | 24.48 |



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