

Coaxial Amplifier

ZRON-8G+ ZRON-8GX+

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



ZRON-8G+



ZRON-8GX+

Generic photo used for illustration purposes only

CASE STYLE: AV243

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.

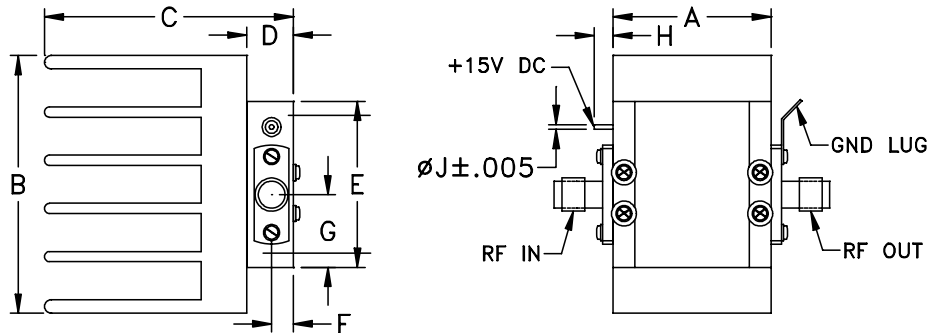
Permanent damage may occur if any of these limits are exceeded.

Notes

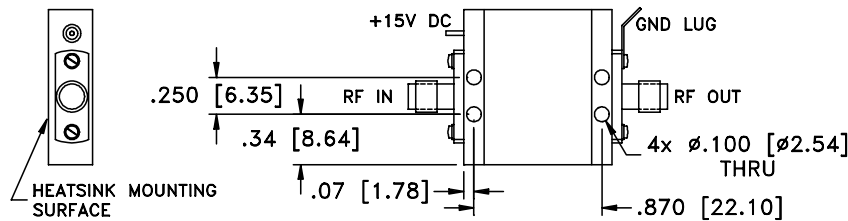
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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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

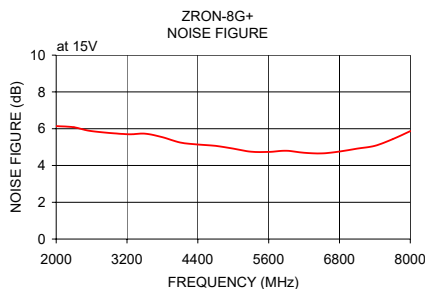
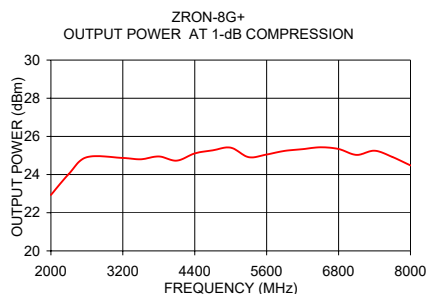
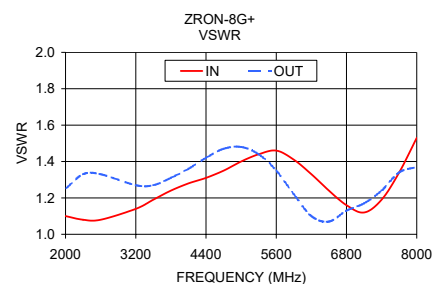
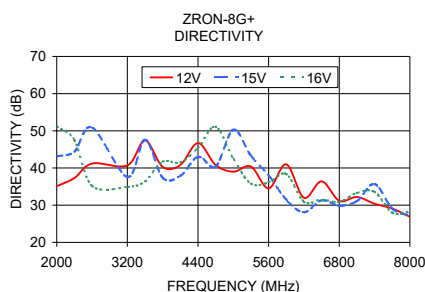
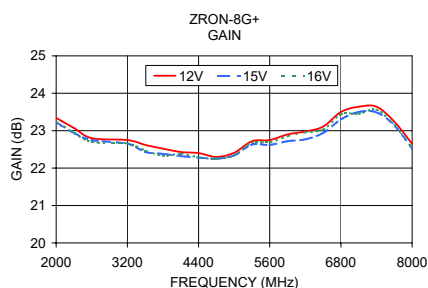
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Typical Performance Data/Curves

ZRON-8G+ ZRON-8GX+

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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