

Plug-In

Amplifier

AMP-3G

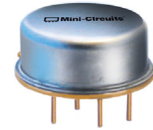
50Ω Low Power 30 to 3000 MHz

Features

- wideband, 30 to 3000 MHz
- low noise, 3.5 dB typ.
- hermetic, TO-8 can
- protected by US Patent 6,943,629

Applications

- military, hi-rel applications
- satellite communications
- cellular
- GPS
- MMDS
- ISM
- PCS/DCS



CASE STYLE: PP230

Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)		MAXIMUM POWER (dBm)			DYNAMIC RANGE		VSWR (:1) Typ.		DC POWER	
	f_L	f_U	Min.	Flatness Max.	Output (1 dB Compr.)		Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
AMP-3G	30	3000	8	±0.75	+9.5 L	+9.5 U	+13	3.5*	+20	2.6	2.5	15	55

*Noise Figure increases with decreasing frequency, 5 dB typical at 300 MHz and 10 dB typ. at 30 MHz.

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)

Pin Connections

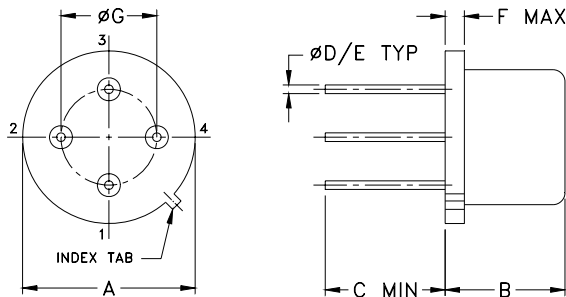
RF IN	2
RF OUT	4
DC	1
GROUND	3
CASE GROUND	3

Maximum Ratings

Operating Temperature	-54°C to 85°C
Storage Temperature	-55°C to 100°C
DC Voltage	+17V 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	wt
.50	.250	.24	.016	.020	.04	.300	grams
12.70	6.35	6.10	0.41	0.51	1.02	7.62	1.8

Notes

- A. 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.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
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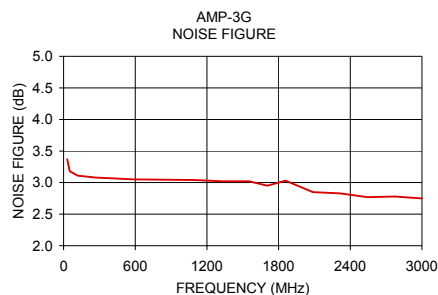
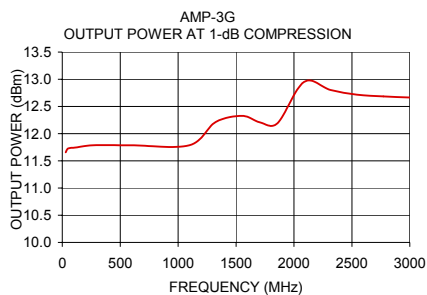
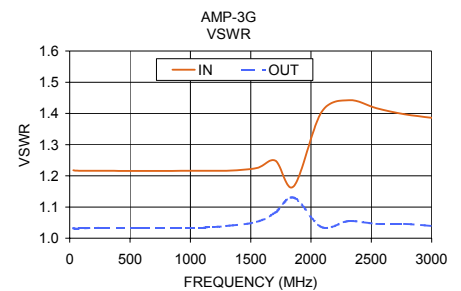
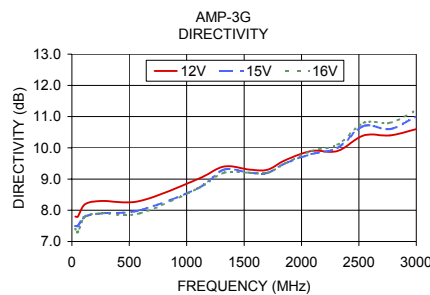
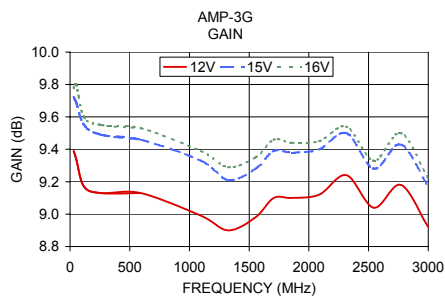


NON-CATALOG

Typical Performance Data/Curves

AMP-3G

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	P _{OUT} at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
30.00	9.39	9.72	9.78	7.80	7.50	7.40	1.22	1.03	3.37	11.65
51.60	9.34	9.69	9.80	7.80	7.50	7.30	1.22	1.03	3.18	11.73
116.50	9.17	9.55	9.60	8.20	7.80	7.80	1.22	1.03	3.11	11.74
262.80	9.13	9.49	9.55	8.30	7.90	7.90	1.22	1.03	3.08	11.79
592.90	9.13	9.46	9.53	8.30	8.00	7.90	1.22	1.03	3.05	11.79
1096.20	8.99	9.33	9.39	9.00	8.70	8.70	1.22	1.03	3.04	11.79
1324.60	8.90	9.21	9.29	9.40	9.30	9.20	1.22	1.04	3.02	12.21
1553.10	8.98	9.28	9.35	9.30	9.20	9.20	1.23	1.05	3.02	12.33
1705.40	9.10	9.39	9.46	9.30	9.20	9.20	1.25	1.08	2.95	12.21
1857.70	9.10	9.38	9.44	9.60	9.50	9.50	1.17	1.13	3.03	12.19
2086.20	9.12	9.40	9.45	9.90	9.80	9.90	1.40	1.04	2.85	12.95
2314.60	9.24	9.50	9.54	9.90	10.00	10.10	1.44	1.06	2.83	12.80
2543.10	9.04	9.28	9.33	10.40	10.70	10.80	1.42	1.05	2.77	12.72
2771.50	9.18	9.43	9.50	10.40	10.60	10.80	1.40	1.05	2.78	12.68
3000.00	8.92	9.17	9.22	10.60	11.00	11.20	1.39	1.04	2.75	12.66



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