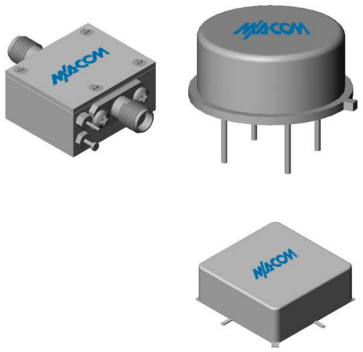
A1211/SMA1211



10 TO 1200 MHz

CASCADABLE AMPLIFIER

· HIGH EFFICIENCY: 16 mA at +5 Vdc
· LOW NOISE FIGURE: 2.8 dB at 5 Vdc (TYP.)
· LOW CURRENT DRAIN: 15.5 mA at 5 Vdc
· MEDIUM OUTPUT POWER: +11 dBm at 8 Vdc (TYP.)
· MEDIUM THIRD I.P.: +25 dBm at 8 Vdc

Specifications (Rev. Date: 6/01)*

Characteristics	Typical	Guaranteed	
		0° to 50°C	-54° to +85°C
Frequency	5-1300 MHz	10-1200 MHz	10-1200 MHz
Small Signal Gain (min.)	14.0 dB	12.5 dB	12.0 dB
Gain Flatness (max.)	±0.3 dB	±0.6 dB	±0.8 dB
Reverse Isolation	16 dB		
Noise Figure (max.)	2.8 dB	3.5 dB	4.0 dB
Power Output @ 1 dB comp. (min.)	6.0 dBm	5.0 dBm	4.5 dBm
IP3	+20 dBm		
IP2	+27 dBm		
Second Order Harmonic IP	+33 dBm		
VSWR Input / Output (max.)	1.4:1 / 1.4:1	1.9:1 / 1.9:1	2.0:1 / 2.0:1
DC Current @ 5 Volts (max.)	15.5 mA	18 mA	19 mA

* Measured in a 50-ohm system at +5 Vdc Nominal. Subject to change without notice.

Absolute Maximum Ratings

Storage Temperature	-62° to +125°C
Max. Case Temperature	125°C
Max. DC Voltage	+10 Volts
Max. Continuous RF Input Power	+10 dBm
Max. Short Term RF Input Power (1 minute max.)	50 mW
Max. Peak Power (3 µsec max.)	0.5 W
"S" Series Burn-in Temperature (Case)	125°C

Thermal Data: V_{cc} = 5 Vdc

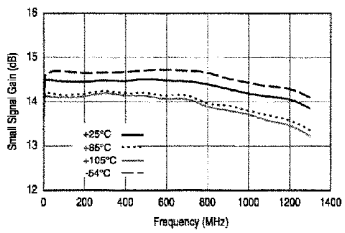
Thermal Resistance θ_{jc}	184°C/W
Transistor Power Dissipation P_d	0.051 W
Junction Temperature Rise Above Case T_{jc}	9°C

Outline Drawings

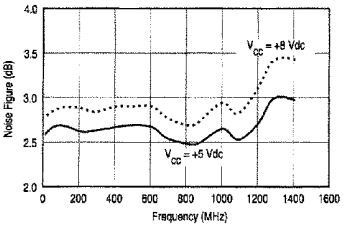
Package	TO-8	Surface Mount	SMA Connectorized
Figure	BG	AA	CE
Model	A1211	SMA1211	CA1211

Typical Performance @ 25°C

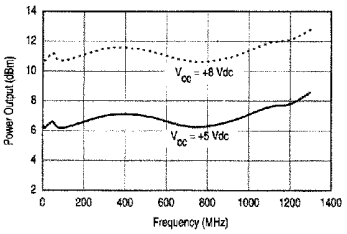
Small Signal Gain



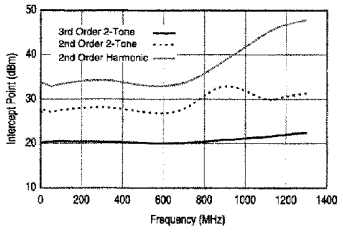
Noise Figure



Power Output (1dB Gain Compression)



Intercept Point



VSWR

