

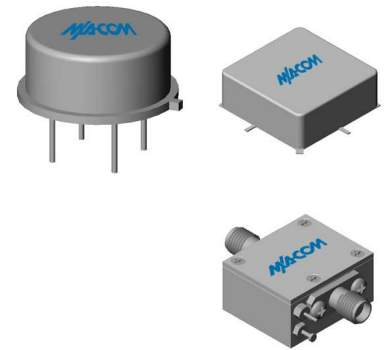


A6011/SMA6011

2000 TO 6000 MHz

CASCADABLE AMPLIFIER

- LOW NOISE FIGURE: 1.5 dB (TYP.)
- MEDIUM OUTPUT POWER: +18 dBm (TYP.)
- HIGH EFFICIENCY: 58 mA (TYP.) @ +5 Vdc
- PHEMT AMPLIFIER



Specifications (Rev. Date: 6/01)*

Characteristics	Typical	Guaranteed	
		0° to 50°C	-54° to +85°C
Frequency	1.5-6.0 GHz	2.0-6.0 GHz	2.0-6.0 GHz
Small Signal Gain (min.)	14.8 dB	13.5 dB	12.5 dB
Gain Flatness (max.)	±0.6 dB	±0.9 dB	±1.1 dB
Reverse Isolation	16 dB		
Noise Figure (max.)	1.5 dB	2.5 dB	3.0 dB
Power Output @ 1 dB comp. (min.)	18.0 dBm	16.5 dBm	16.0 dBm
IP3	+30 dBm		
IP2	+45 dBm		
Second Order Harmonic IP	+50 dBm		
VSWR Input / Output (max.)	1.9:1 / 1.9:1	2.1:1 / 2.1:1	2.2:1 / 2.2:1
DC Current @ 5 Volts (max.)	58 mA	65 mA	70 mA

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

Absolute Maximum Ratings

Storage Temperature	-62° to +150°C
Max. Case Temperature	125°C
Max. DC Voltage	+7 Volts
Max. Continuous RF Input Power	+13 dBm
Max. Short Term RF Input Power (1 minute max.)	100 mW
Max. Peak Power (3 μsec max.)	0.25 W
“S” Series Burn-in Temperature (Case)	125°C

Thermal Data: $V_{cc} = 5$ Vdc

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

Outline Drawings

Package	TO-8	Surface Mount	SMA Connectorized
Figure	BG	AA	CE
Model	A6011	SMA6011	CA6011

Typical Performance @ 25°C

