

Power GaAs MMIC Amplifier

2 - 6 GHz

MAAM26100-B1

V 2.00

Features

- +29 dBm Typical Saturated Power
- 18 dB Typical Gain
- 25% Power Added Efficiency
- DC Decoupled RF Input and Output
- Small, 7-Lead Ceramic Package

Electrical Specifications @ T_A = +25°C

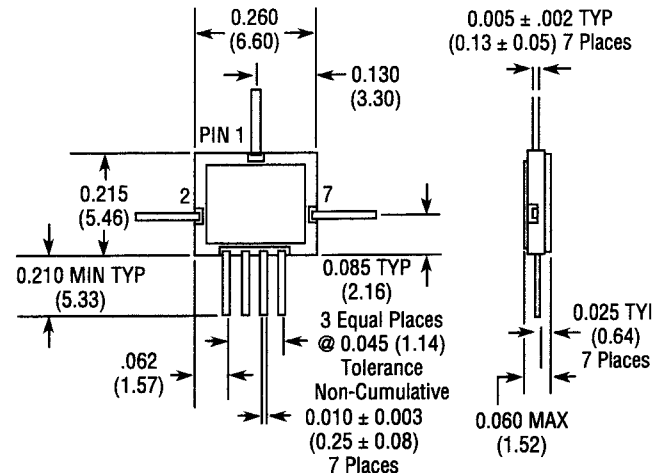
Frequency Range	2.0 – 6.0 GHz	
Gain	18.0 dB Typ	14.0 dB Min
VSWR	Input	2.2:1 Typ
	Output	2.2:1 Typ
Saturated Power Output (Input Power = +14 dBm)	+29 dBm Typ	
Output Power at 1 dB Gain Compression	+27 dBm Typ	
Third Order Intercept	+39 dBm Typ	
Reverse Isolation	30 dB Typ	
Impedance	50 Ω Typ	
Bias Voltage	V _{DD} = +8 V _{DC} , V _{GG} = -5 V _{DC} Typ	
Bias Current		
No RF	I _{DD} = 420 mA Typ	
@ P _{IN} = +14 dBm	I _{DD} = 600 mA Typ	
	I _{GG} = 10 mA Typ	
Thermal Resistance¹	16.5°C/w Typ	

Maximum Ratings

Voltage	V _{DD} = +12 Volts, V _{GG} = -10 Volts
Input Power	+23 dBm
Storage Temperature	-65°C to +150°C
Operating Channel Temperature	+150°C

1. Attachment method not included.

CR-2



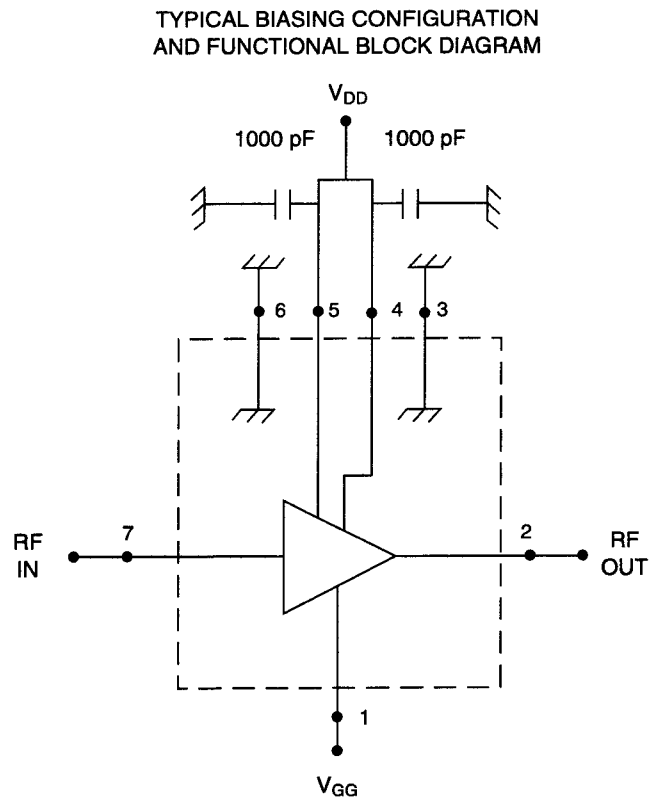
Bottom of Case is AC Ground
Dimensions in () are in mm.
Unless Otherwise Noted: .xxx = ± 0.010 (.xx = ± 0.25)
.xx = ± 0.02 (.x = ± 0.5)

Specifications Subject to Change Without Notice.

Pin Configuration

Pin No.	Function
1	V_{GG}
2	Output
3	Internal GND
4	V_{D2}
5	V_{D1}
6	Internal GND

Schematic



1. Nominal bias is obtained by first connecting -5 volts to pin 1 (V_{GG}), followed by connecting +8 volts to pin 5 (V_{D1}) and pin 4 (V_{D2}). Note sequence.
2. RF ground and thermal interface are the case bottom. Adequate heat sinking is required.

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