

BROADBAND DISTRIBUTED AMPLIFIER

ADM-0040M

The ADM-0040M is a broadband, efficient GaAs PHEMT distributed amplifier. It can be operated with a single positive bias, or with a negative bias voltage to achieve 12 dB typical gain and 22 dBm typical output power at 1 dB compression for only 160 mA of current. Applications include mixer LO amplification, electronic warfare, test and measurement, and amplification of optical modulator signals. It is an excellent alternative to competing GaAs PHEMT distributed amplifiers.



Features

- Optional Positive Bias Operation
- +22 dBm Typical Saturated Output Power
- Buffer- Amplifiers for Mixer LO
- 3rd and 5th Harmonic Generation
- Broadband 50 ohm Matching
- Unconditionally Stable

Electrical Specifications - Specifications guaranteed from -30 to +70°C, measured in a 50-Ohm system.

Parameter	Frequency (GHz)	Min	Typ	Max
Input for Saturated Output (dBm)	DC-40	+5	+10	+15
Saturated Output Power with negative bias (dBm)			+22	
Small Signal Gain with negative bias (dB)			12	
Return Loss (dB)			18	
Noise Figure (dB)			5	
Third Order Output Intercept Point (dBm)			25	
Bias Requirements (mA)				
+5.0 to +8.0 / -0.25 Volts			160	
+5.0 to +8.0 / 0.0 Volts			185	



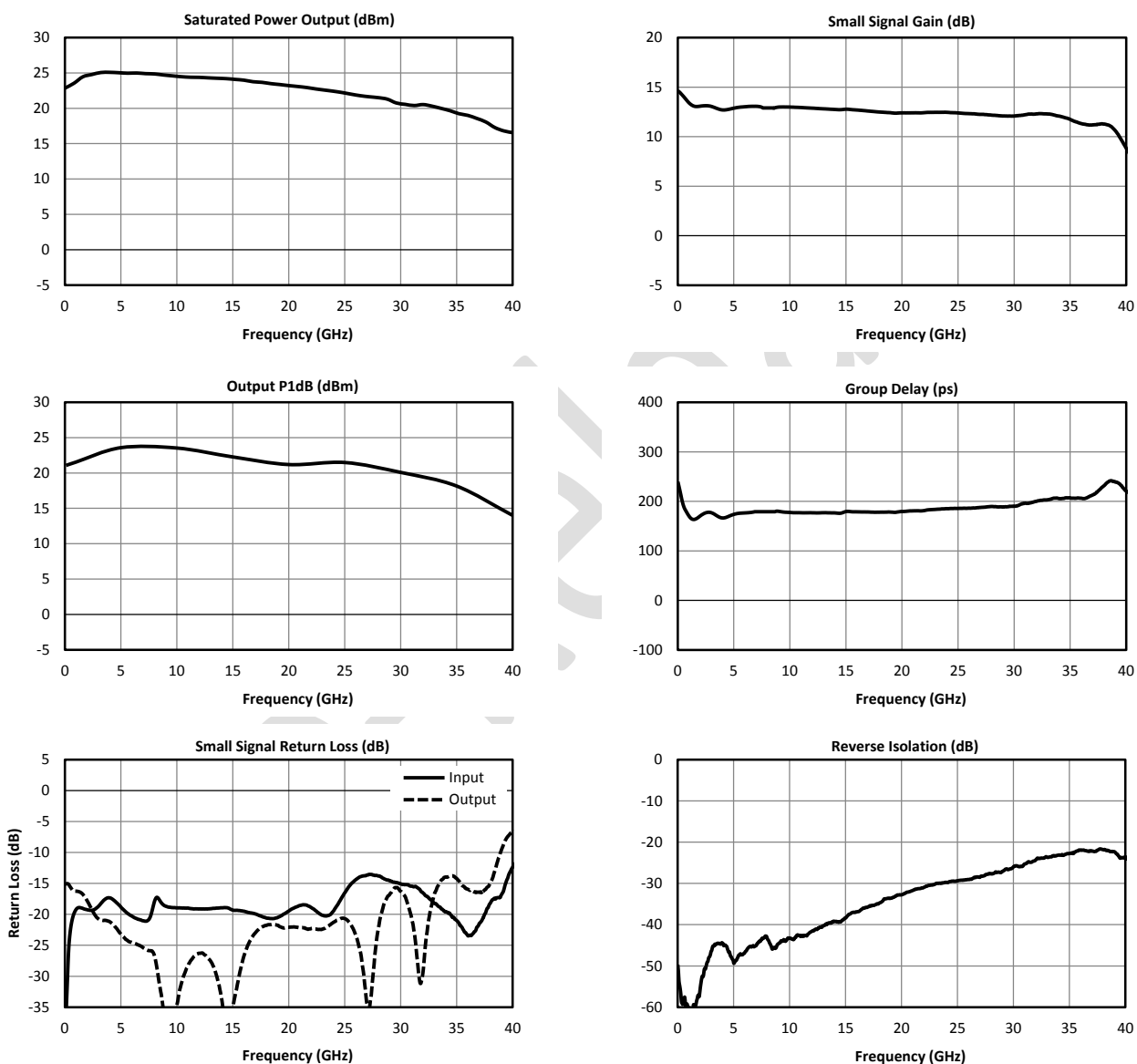
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Frequency DC to 40.0 GHz

Typical Performance



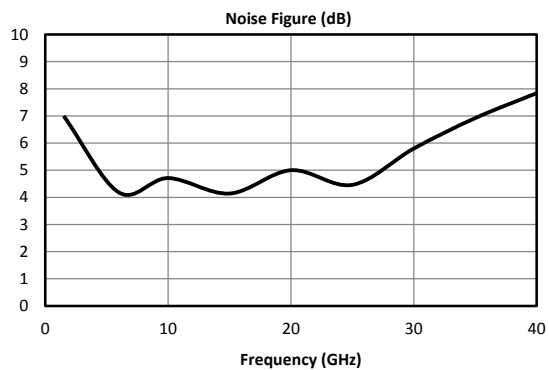
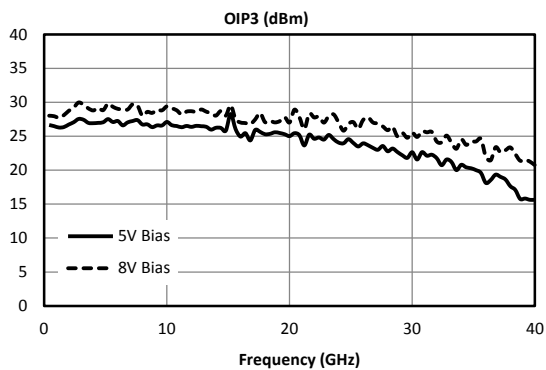


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Frequency DC to 40.0 GHz



Absolute Maximum Ratings	
Parameter	Maximum Rating
Positive Bias Voltage	9 V
Positive Bias Current	200 mA
Negative Bias Voltage	-2 V
Negative Bias Current	3 mA
RF Input Power	+15 dBm
Power Dissipation	1360 mW
Operating Temperature	-55°C to +85°C
Storage Temperature	-65°C to +150°C

DATA SHEET NOTES:

- Specifications are subject to change without notice. Contact Marki Microwave for the most recent specifications and data sheets.

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