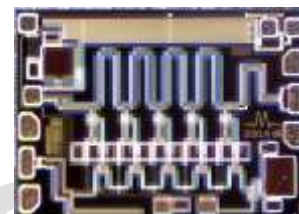


BROADBAND DISTRIBUTED AMPLIFIER

ADM-0133M

The ADM-0133M is a broadband, efficient GaAs PHEMT distributed amplifier with an integrated bias tee. It can be operated with a single positive bias, or with a negative bias voltage to achieve 11 dB typical gain and 20 dBm typical output power at 1 dB compression for only 85 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
- Integrated Blocking Capacitors and Inductors
- +18 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)	1-33	+5	+10	+12
Saturated Output Power with negative bias (dBm)			+18	
Small Signal Gain with negative bias (dB)			11	
Return Loss (dB)			12	
Noise Figure (dB)			4	
Third Order Output Intercept Point (dBm)			25	
Bias Requirements (mA)			85	
+5.0 to +7.0 / -0.25 Volts			120	
+5.0 to +7.0 / 0.0 Volts				



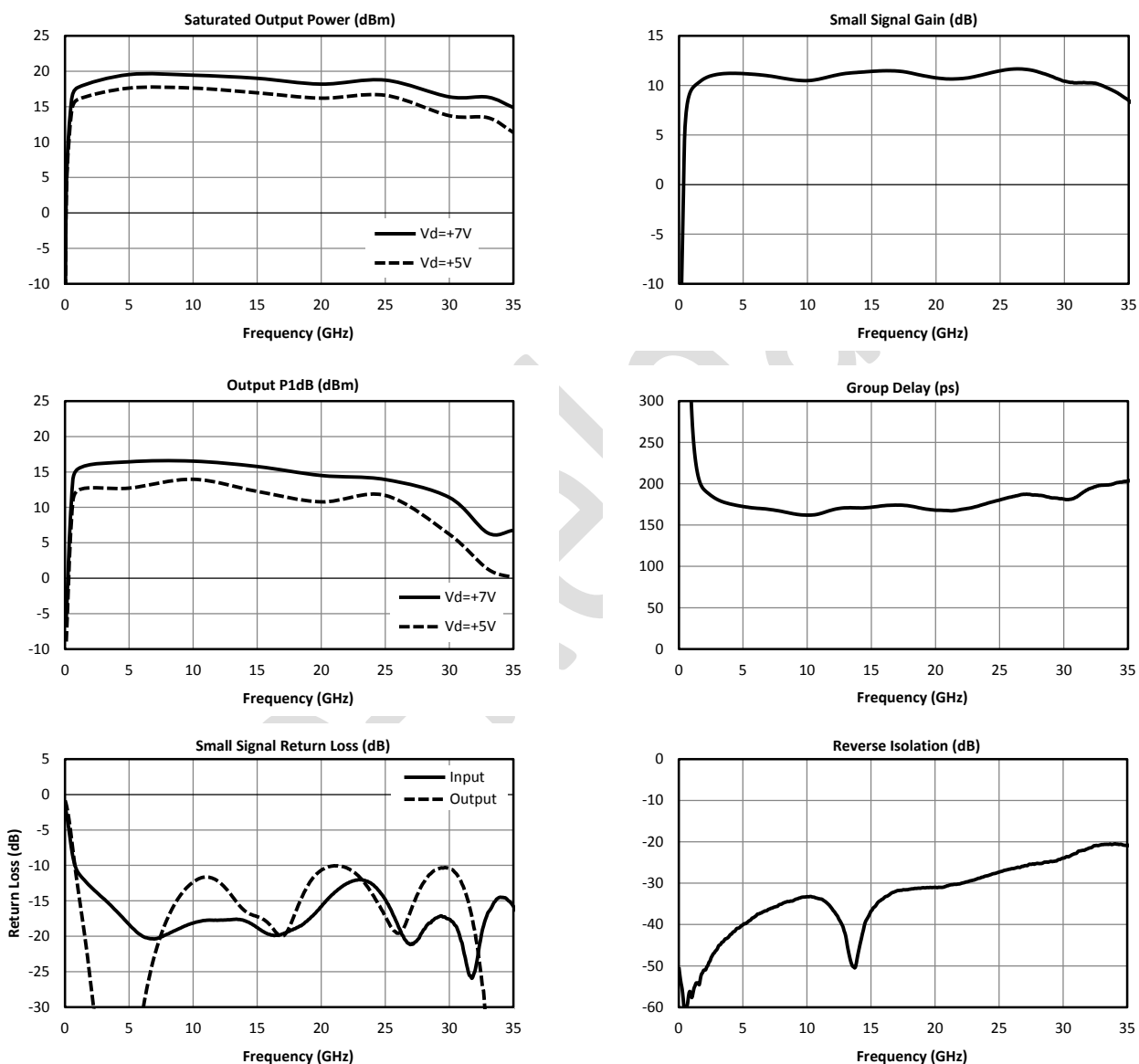
BROADBAND DISTRIBUTED AMPLIFIER

ADM-0133M

Page 2

Frequency 1 to 33.0 GHz

Typical Performance



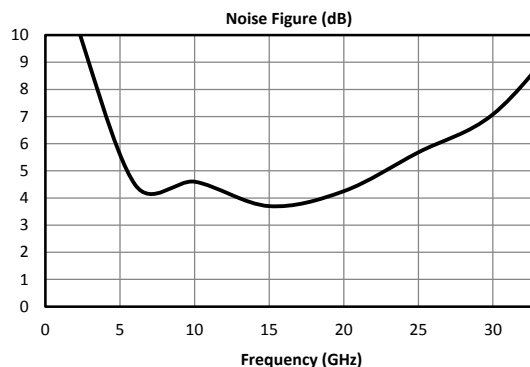
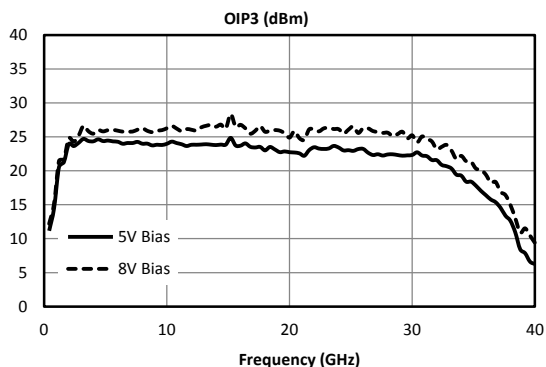


BROADBAND DISTRIBUTED AMPLIFIER

ADM-0133M

Page 2

Frequency 1 to 33.0 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	2 mA
RF Input Power	+15 dBm
Power Dissipation	875 mW
Operating Temperature	-55°C to +85°C
Storage Temperature	-65°C to +150°C

DATA SHEET NOTES:

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

Marki Microwave reserves the right to make changes to the product(s) or information contained herein without notice. Marki Microwave makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Marki Microwave assume any liability whatsoever arising out of the use of or application of any product.