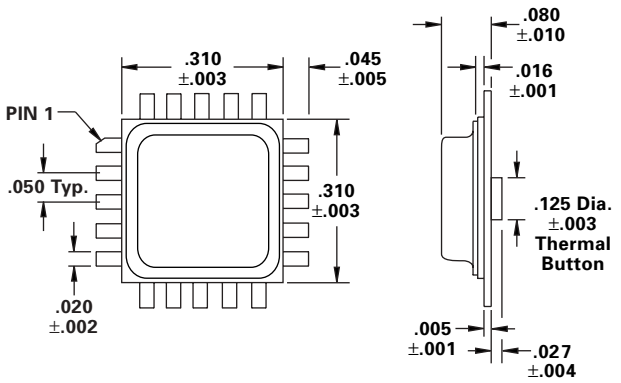
AMPR

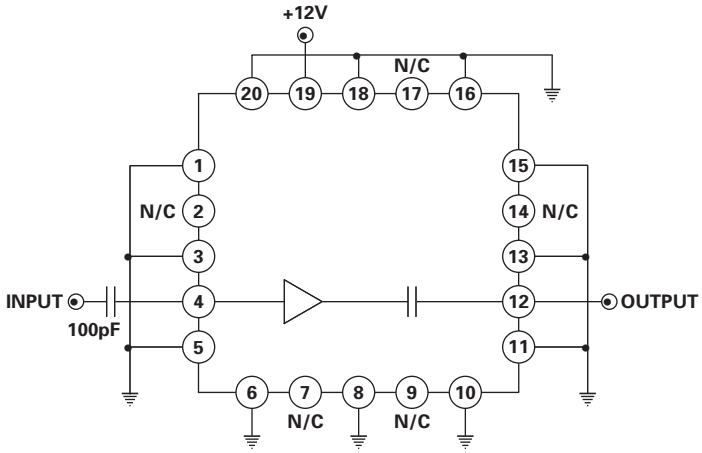
FEATURES

- 1-8 GHz Broad Bandwidth
- Typical Gain of 8 dB
- +16 dBm P-out @ 1 dB compression
- Single Power Supply
- Input/Output VSWR Typical 1.5:1
- 20-Pin Hermetic Package
- Available as Die, Part# DAMB4011D

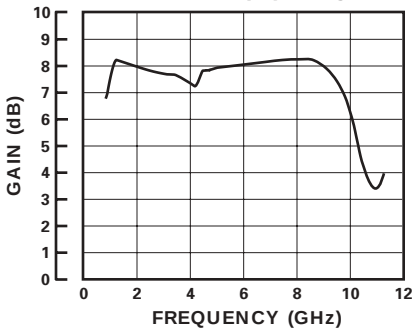
MODEL NO. DAMB5111

Amplifier





Gain vs. Freq. (packaged)

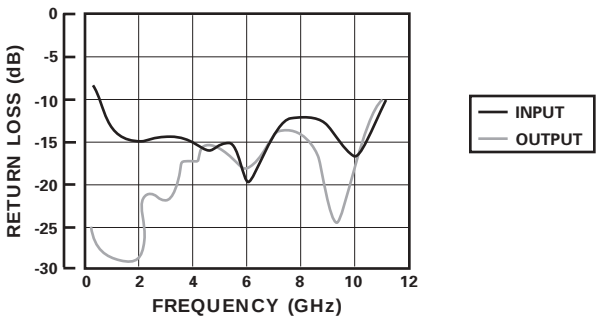


S-Parameters (typical) -I_{DD} = 99.1 mA

FREQ	S_{11}		S_{21}		S_{12}		S_{22}	
GHz	MAG.	ANG.	MAG.	ANG.	MAG.	ANG.	MAG.	ANG.
0.5	0.031	26	2.398	-169	0.016	82	0.371	-60
1.0	0.054	-66	2.834	159	0.028	56	0.304	-86
2.0	0.052	-140	2.662	115	0.041	35	0.247	-135
3.0	0.033	-114	2.528	80	0.061	18	0.236	-177
4.0	0.077	-102	2.486	47	0.080	-7	0.224	141
5.0	0.141	-122	2.561	14	0.097	-37	0.168	101
6.0	0.195	-145	2.683	-26	0.105	-74	0.060	70
7.0	0.216	-176	2.644	-68	0.104	-115	0.096	160
8.0	0.113	150	2.673	-116	0.112	-163	0.166	110
9.0	0.258	-122	2.473	177	0.135	126	0.070	-97
10.0	0.407	176	1.675	113	0.133	60	0.339	152
10.5	0.069	111	2.282	52	0.180	8	0.206	57

Note: 1. Test Conditions: V_{DD} = +12V, T_A = 25°C.
2. S-Parameters and other data have been measured with the die in a microstrip test fixture as shown in the typical bonding diagram.

Input / Output Return Loss vs. Freq. (packaged)



ELECTRICAL SPECIFICATIONS

T_A = 25°C, V_{DD} = +12V, RF = 4.0 GHz

Parameter (1)	Min	Typ	Max	Units
Frequency of Operation	1		8	GHz
Gain		6.8	8	dB
Gain Flatness		±0.5	±1.0	dB
Noise Figure		5		dB
Output 1 dB Compression	+16			dBm
Input / Output VSWR		1.5:1	2:1	
Reverse Isolation	18	23		dB
Output Third-Order Intercept (2)		+28		dBm
DC Power Supply	10	12	15	V
Supply Current		100	120	mA

Note: 1. Min / Max Values Listed are Production Tested
2. Frequency Separation of Two Signals is 500 KHz