MMIC SURFACE MOUNT

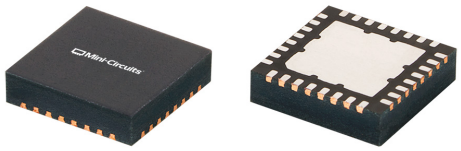
Power Amplifier

GNA-63-5W+

50Ω 10 to 6000 MHz 6 W Output Power

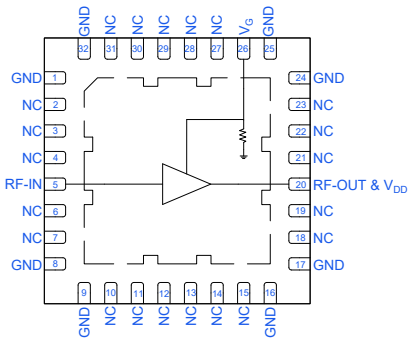
THE BIG DEAL

- P_{SAT}, Typ. +38.5 dBm
- Output Power, > 6 W @ P_{IN} = +26 dBm
- PAE, Typ. 35%
- Large Signal Gain, Typ. 12 dB
- Gain Flatness < ± 1 dB
- IM3, Typ. -32 dBc @ P_{OUT} = +26 dBm/tone
- IM5, Typ. -56 dBc @ P_{OUT} = +26 dBm/tone
- Supply Voltage, +28 V at 400 mA
- 5×5 mm 32-Lead QFN-Style Package



Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM (TOP VIEW)



APPLICATIONS

- Land Mobile and Military Radio Systems
- Radar, EW, and ECM Defense Systems
- Satellite Communications
- Test & Measurement Systems

PRODUCT OVERVIEW

The GNA-63-5W+ is a GaN-on-SiC HEMT MMIC high power amplifier operating from 10 MHz to 6 GHz. Offering flat gain and high-efficiency, this power amplifier is designed for demanding RF applications requiring high output power, excellent linearity, and a compact footprint. When driven with an input power level of +26 dBm, the amplifier provides a typical 12 dB of flat power gain across a broad frequency range, delivers more than 6 W of output power and achieves 35% power-added efficiency. At 3 GHz, IM3 is -32 dBc and IM5 is -56 dBc with a P_{OUT} of +26 dBm/tone. This excellent linearity preserves signal integrity, making the amplifier ideal for high-fidelity communication systems. The device operates from a +28 V supply and consumes 400 mA of quiescent current. Potential applications include radar, electronic warfare, and satellite communication systems. The GNA-63-5W+ is matched to 50Ω at the input and output, making it easy to implement. It comes in a 5×5 mm, 32-lead QFN-Style surface-mount package, ensuring excellent thermal performance and compatibility with high-volume manufacturing.

KEY FEATURES

Feature	Advantages
• Output Power, > 6 W @ P_{IN} = +26 dBm • Power Gain, Typ. 12 dB • PAE, Typ. 35%	High efficiency, flat gain, and high output power over the full band enables long signal coverage, higher link margin and improved signal detection capability.
At P_{OUT} = +26 dBm • IM3: -32 dBc • IM5: -56 dBc	Excellent IM3 and IM5 provide low in-band IM distortion products, enabling clean multi-carrier operation and minimizing signal-to-noise degradation in high fidelity communication systems.
• 50Ω matched • Operating Temperature -55 °C to +95 °C	Fully self-contained RF interface with no external matching network required. This reduces component count, board area, and design iteration cycles. Wide temperature operation and standard supply voltage ensure drop-in compatibility across defense, satellite, and communications platforms from prototype to production.
5×5 mm 32-Lead QFN-Style Package	Small footprint saves space in dense layouts while providing low inductance, repeatable transitions, and excellent thermal contact to the PCB. Industry standard packaging allows for ease of assembly in high volume manufacturing processes.

Power Amplifier

GNA-63-5W+

50Ω 10 to 6000 MHz 6 W Output Power

ELECTRICAL SPECIFICATIONS[1] AT +25 °C, AND Z_0 = 50Ω UNLESS NOTED OTHERWISE

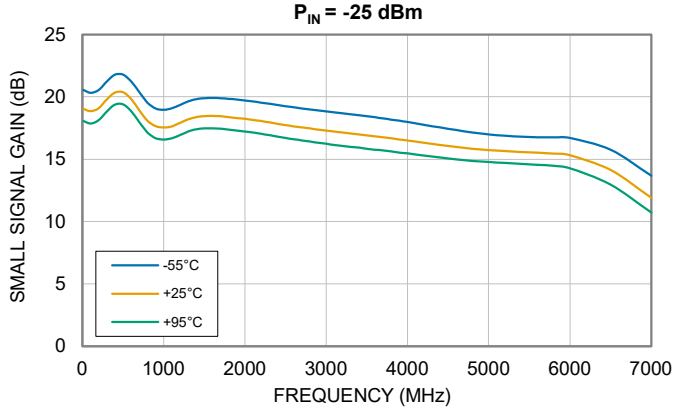
Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		10		6000	MHz
Small Signal Gain	10 1000 2000 3000 4000 6000	19.4 16.0 16.7 15.9 14.9 12.9	20.4 17.8 18.6 17.7 17.0 15.7		dB
Input Return Loss	10 1000 2000 3000 4000 6000		11 10 14 13 20 15		dB
Output Return Loss	10 1000 2000 3000 4000 6000		7 9 8 12 10 14		dB
Isolation	10–6000		31.7		dB
Output Power at Saturation (P_{SAT})[2]	10 1000 2000 3000 4000 6000		+39.5 +39.4 +39.0 +38.5 +38.4 +38.8		dBm
Output Power (P_{IN} = +26 dBm)	10 1000 2000 3000 4000 6000		+39.4 +39.2 +38.9 +38.2 +37.5 +37.5		dBm
Power Added Efficiency (P_{IN} = +26 dBm)	10 1000 2000 3000 4000 6000		66 51 42 36 28 33		%
Large Signal Gain (P_{IN} = +26 dBm)	10 1000 2000 3000 4000 6000		13.5 13.3 13.0 12.3 11.7 11.7		dB
Device Operating Voltage (V_{DD})		+20	+28	+28	V
Device Operating Current (I_{DD})[3]		100	400	400	mA
Device Gate Voltage (V_G)			-1.7		V
Device Gate Current (I_G)			20		µA
Device Current Variation Vs. Temperature[4]			-0.146		mA/°C
Device Current Variation Vs. Voltage[5]			-3		µA/mV

1. Tested on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with an external bias-T. See Figure 2. Board loss de-embedded to the device. Data measured in CW operation.
2. P_{SAT} is defined as when the output power changes 0.1 dB per 1 dB change in input power.
3. Current at P_{IN} = -25 dBm. Increases to 750 mA when P_{IN} = +26 dBm.
4. (Current at +95 °C - Current at -55 °C) / (+150 °C)
5. (Current at +28 V - Current at +20 V) / (+8 V)

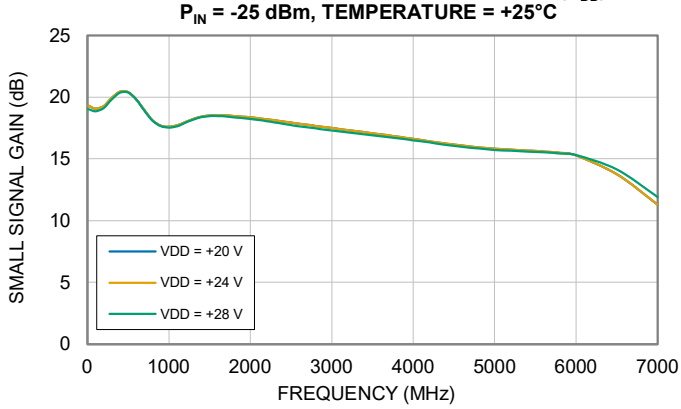
TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

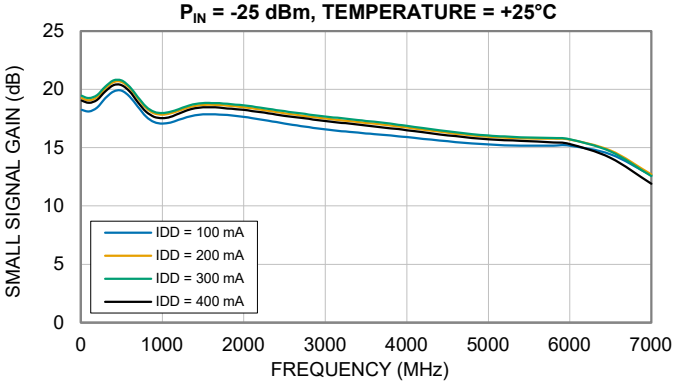
SMALL SIGNAL GAIN vs. TEMPERATURE
P_{IN} = -25 dBm



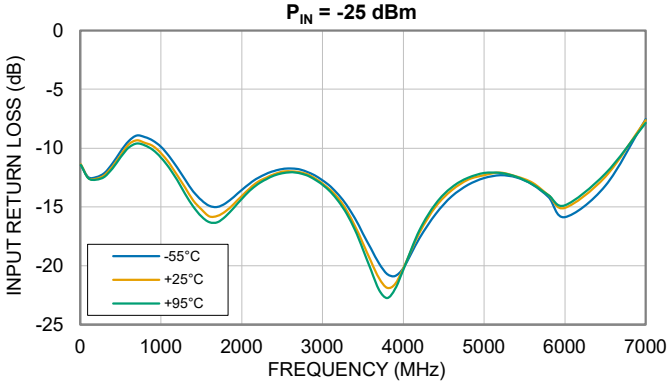
SMALL SIGNAL GAIN vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



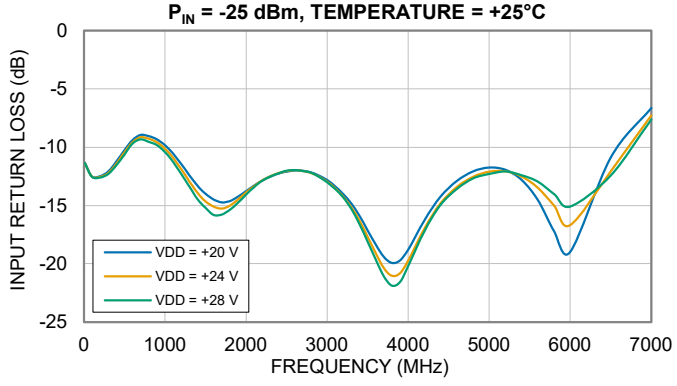
SMALL SIGNAL GAIN vs. DEVICE CURRENT (I_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



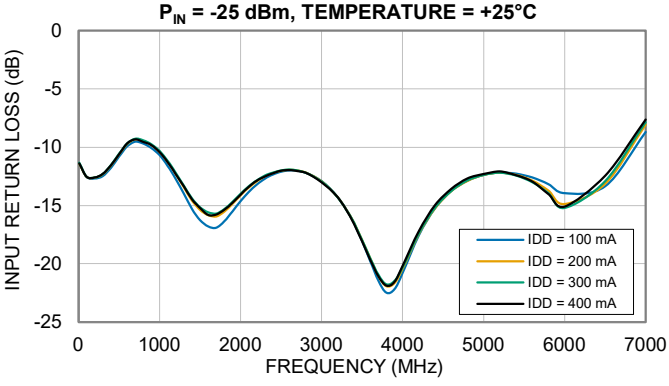
INPUT RETURN LOSS vs. TEMPERATURE
P_{IN} = -25 dBm



INPUT RETURN LOSS vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



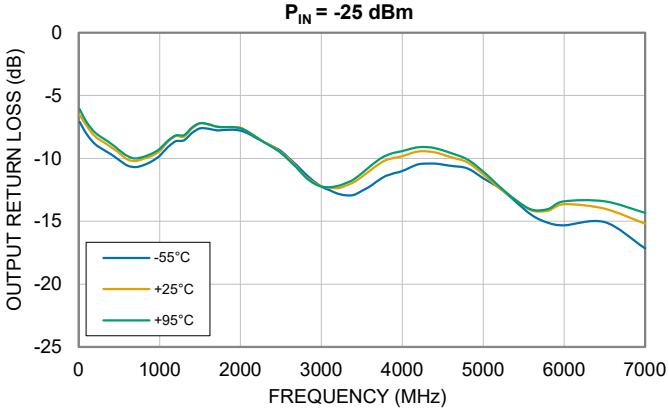
INPUT RETURN LOSS vs. DEVICE CURRENT (I_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



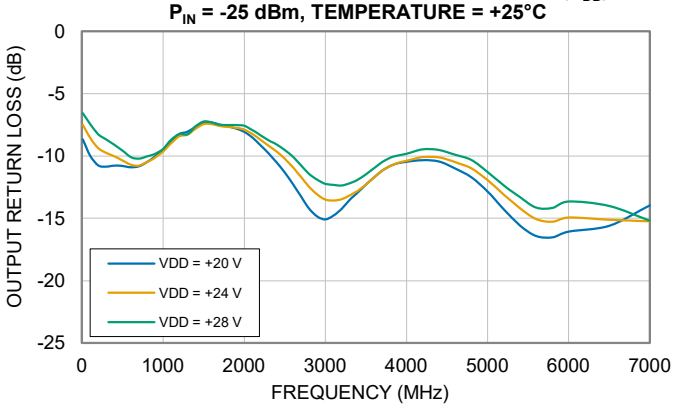
TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

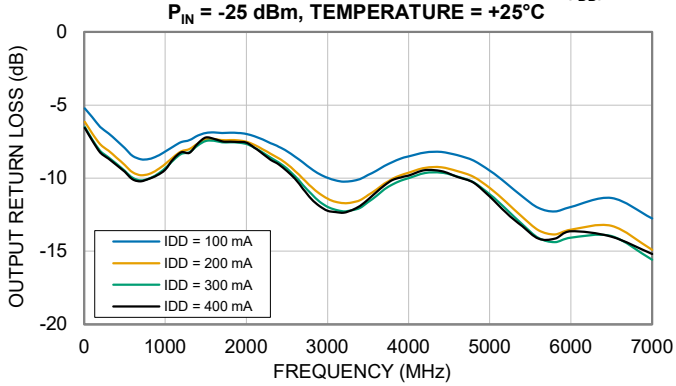
OUTPUT RETURN LOSS vs. TEMPERATURE
P_{IN} = -25 dBm



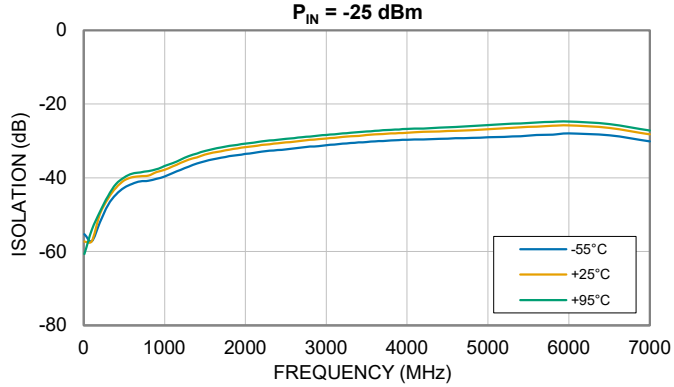
OUTPUT RETURN LOSS vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



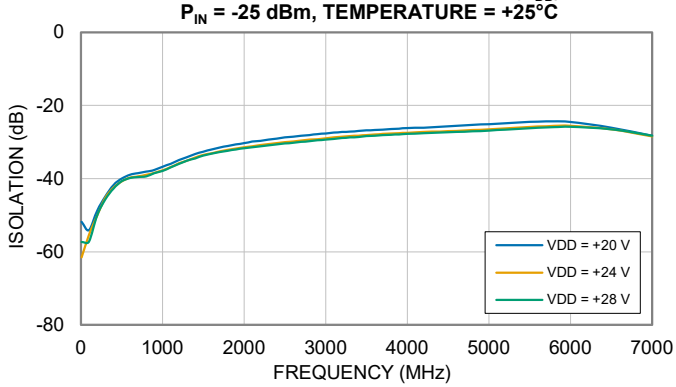
OUTPUT RETURN LOSS vs. DEVICE CURRENT (I_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



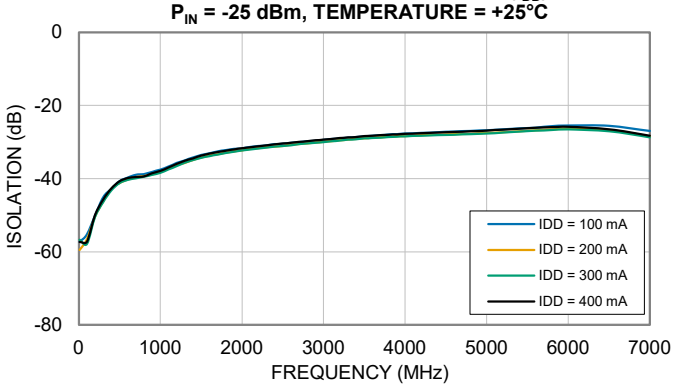
ISOLATION vs. TEMPERATURE
P_{IN} = -25 dBm



ISOLATION vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C

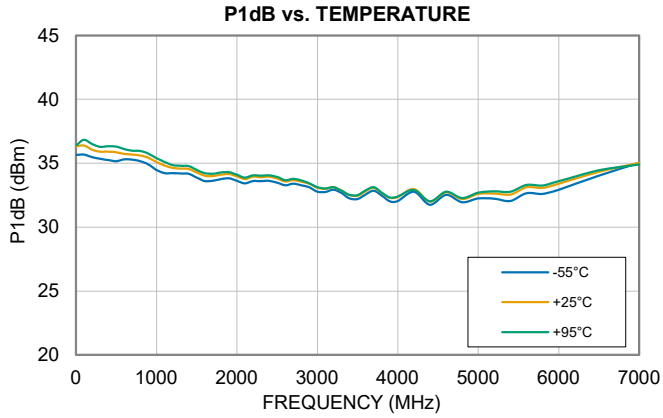


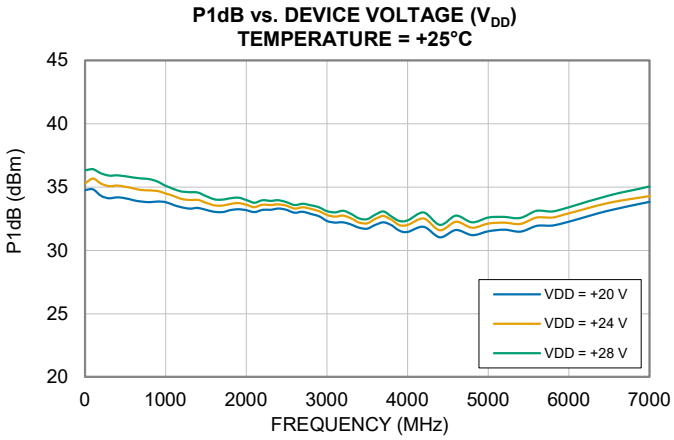
ISOLATION vs. DEVICE CURRENT (I_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C

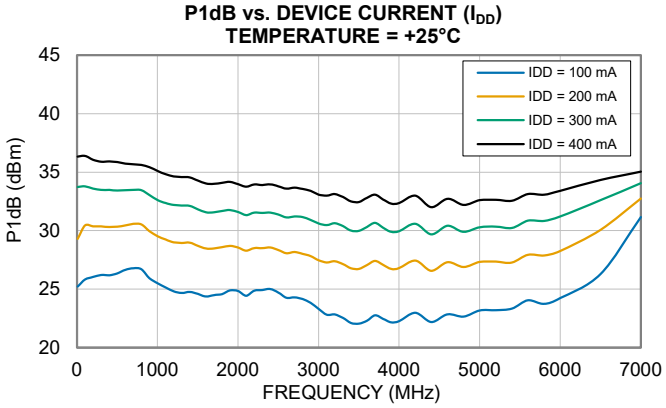


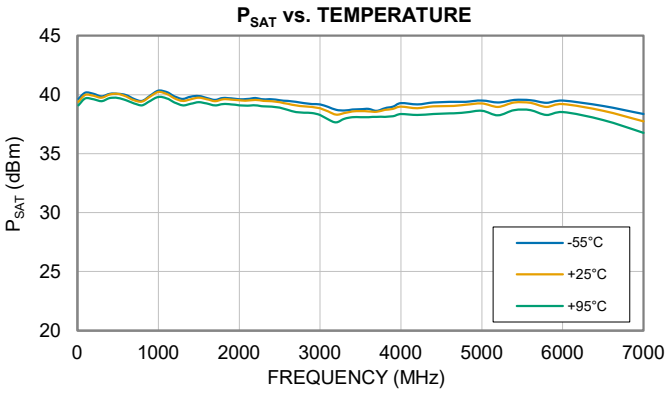
TYPICAL PERFORMANCE GRAPHS

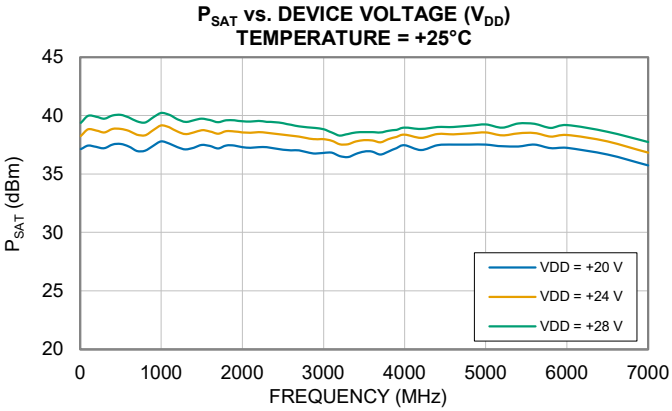
Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

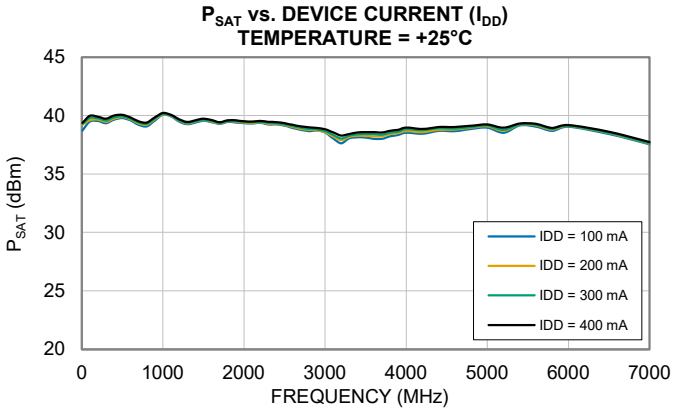








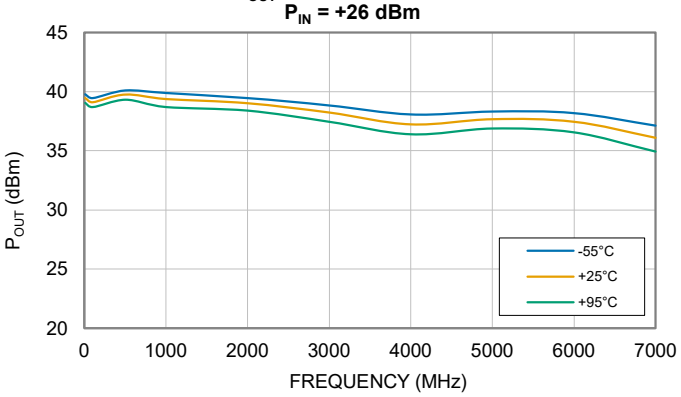




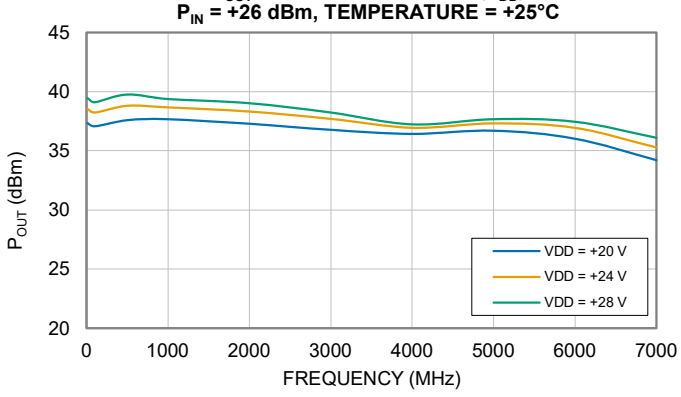
TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

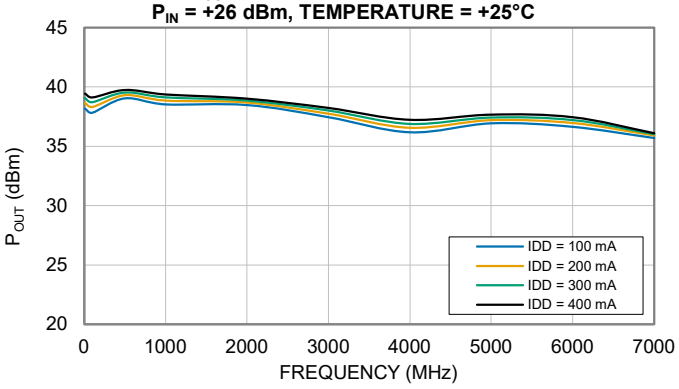
P_{OUT} vs. TEMPERATURE
P_{IN} = +26 dBm



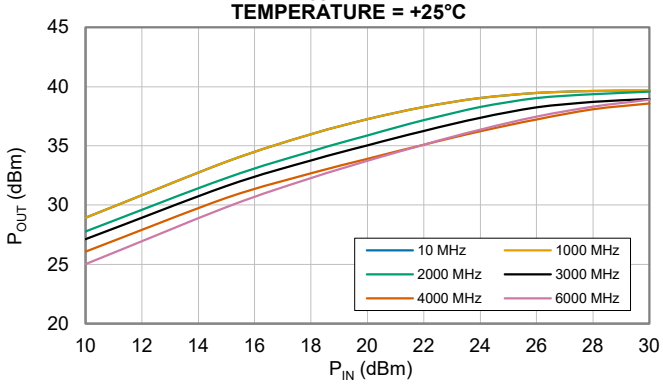
P_{OUT} vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = +26 dBm, TEMPERATURE = +25°C



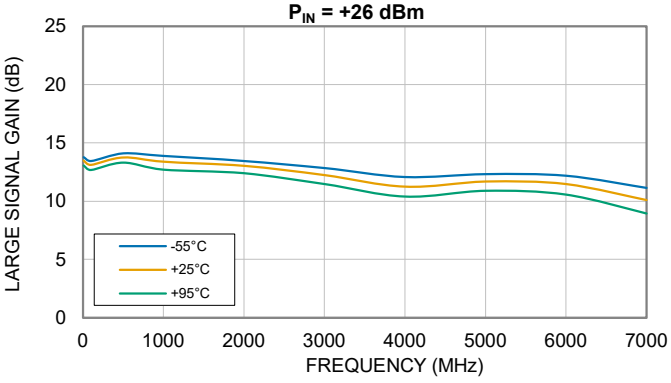
P_{OUT} vs. DEVICE CURRENT (I_{DD})
P_{IN} = +26 dBm, TEMPERATURE = +25°C



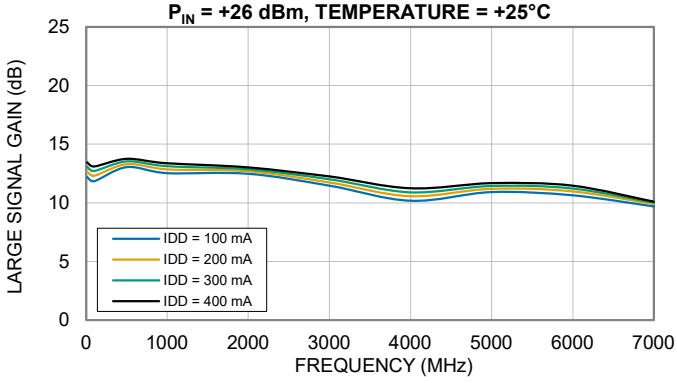
P_{OUT} vs. P_{IN}
TEMPERATURE = +25°C



LARGE SIGNAL GAIN vs. TEMPERATURE
P_{IN} = +26 dBm



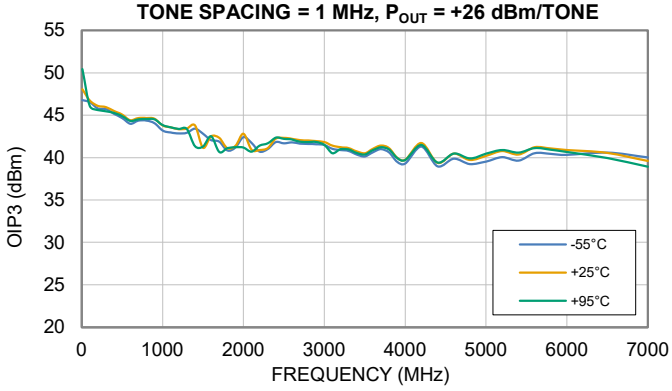
LARGE SIGNAL GAIN vs. DEVICE CURRENT (I_{DD})
P_{IN} = +26 dBm, TEMPERATURE = +25°C



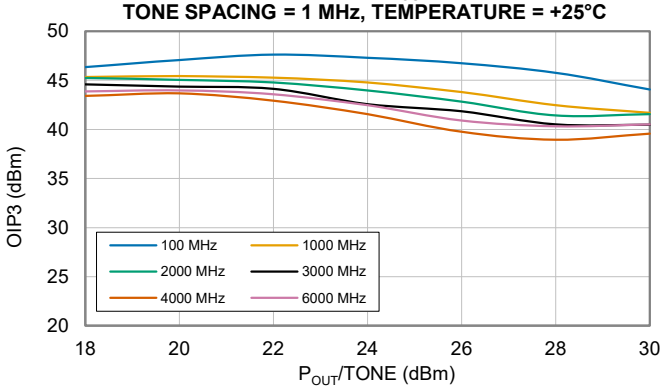
TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

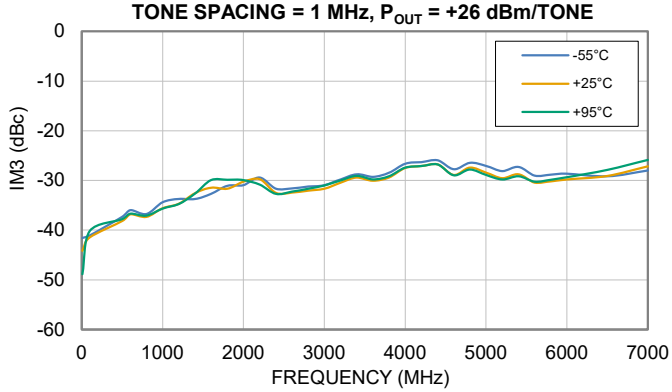
OIP3 vs. TEMPERATURE
TONE SPACING = 1 MHz, P_{OUT} = +26 dBm/TONE



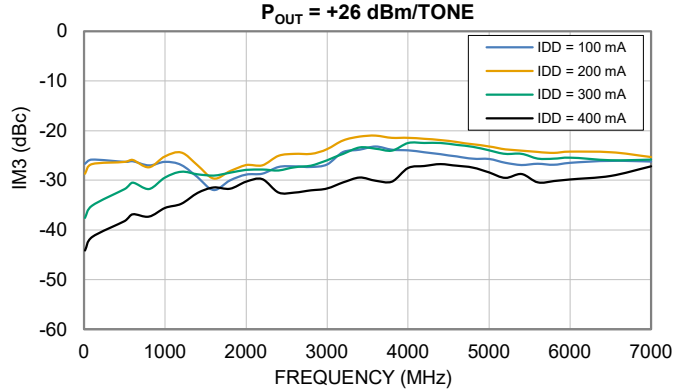
OIP3 vs. P_{OUT}
TONE SPACING = 1 MHz, TEMPERATURE = +25°C



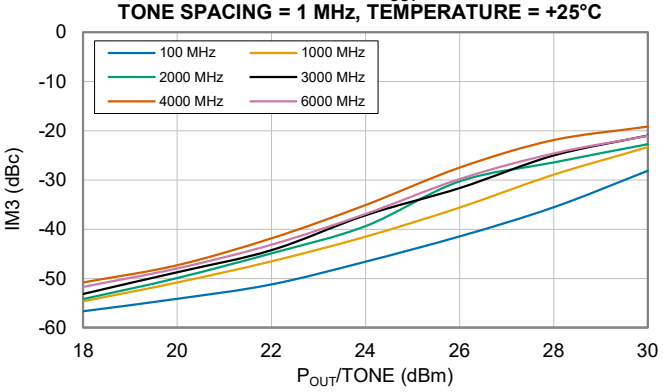
IM3 vs. TEMPERATURE
TONE SPACING = 1 MHz, P_{OUT} = +26 dBm/TONE



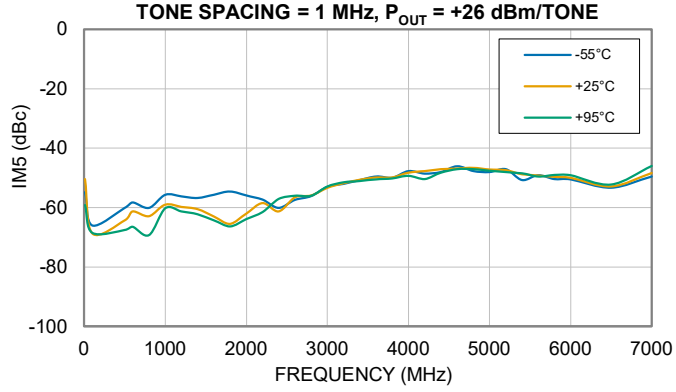
IM3 vs. DEVICE CURRENT (I_{DD})
TONE SPACING = 1 MHz, TEMPERATURE = +25°C,
P_{OUT} = +26 dBm/TONE



IM3 vs. P_{OUT}
TONE SPACING = 1 MHz, TEMPERATURE = +25°C



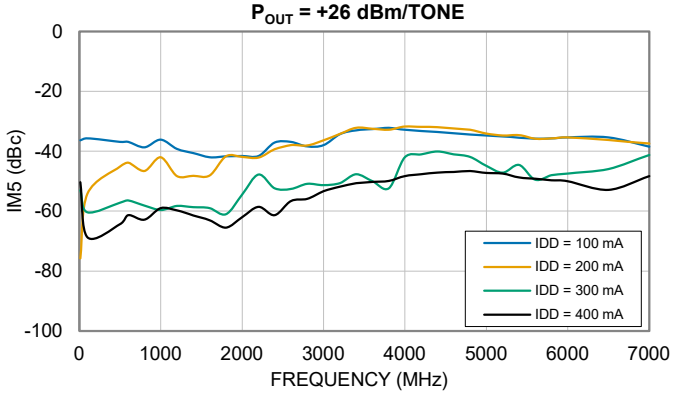
IM5 vs. TEMPERATURE
TONE SPACING = 1 MHz, P_{OUT} = +26 dBm/TONE



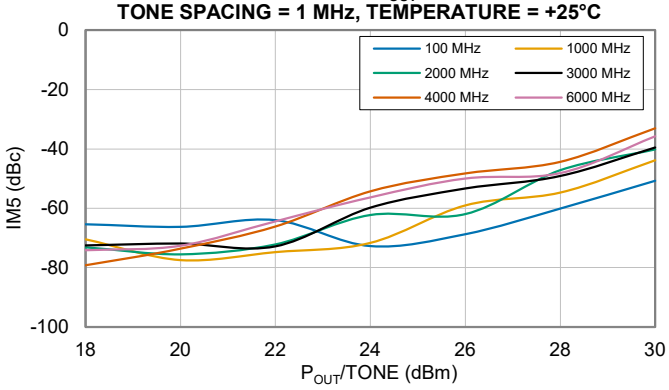
TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

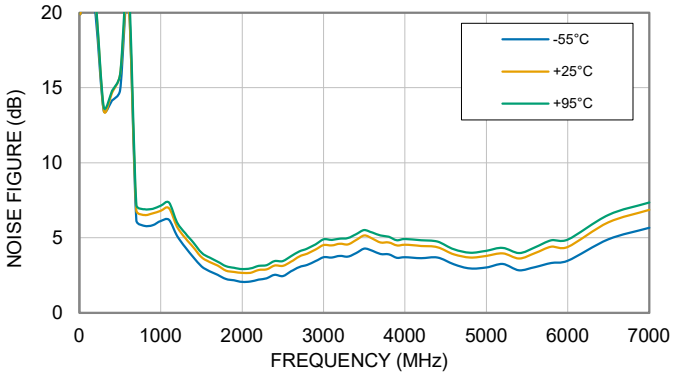
IM5 vs. DEVICE CURRENT (I_{DD})
TONE SPACING = 1 MHz, TEMPERATURE = +25°C,
P_{OUT} = +26 dBm/TONE



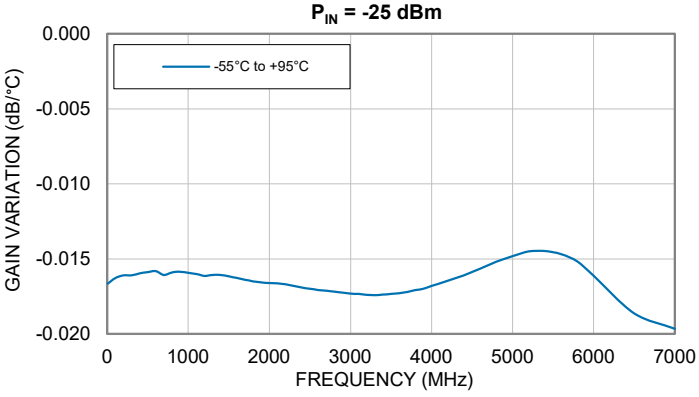
IM5 vs. P_{OUT}
TONE SPACING = 1 MHz, TEMPERATURE = +25°C



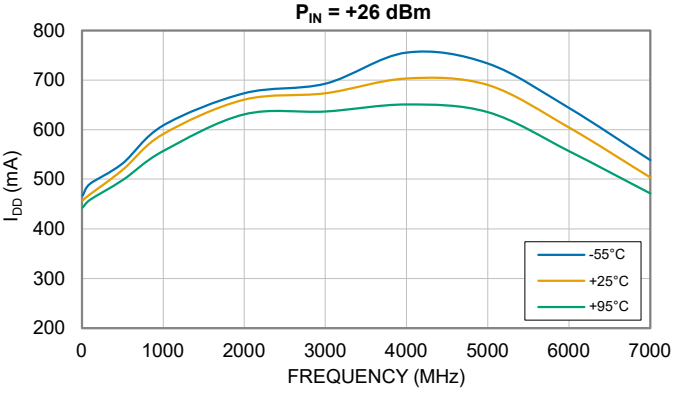
NOISE FIGURE vs. TEMPERATURE



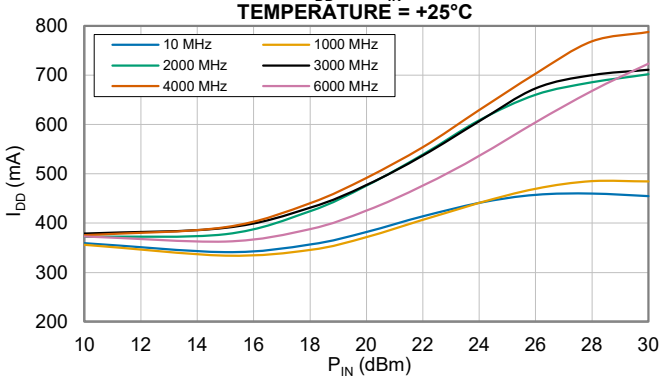
GAIN VARIATION vs. TEMPERATURE
P_{IN} = -25 dBm



I_{DD} vs. TEMPERATURE
P_{IN} = +26 dBm



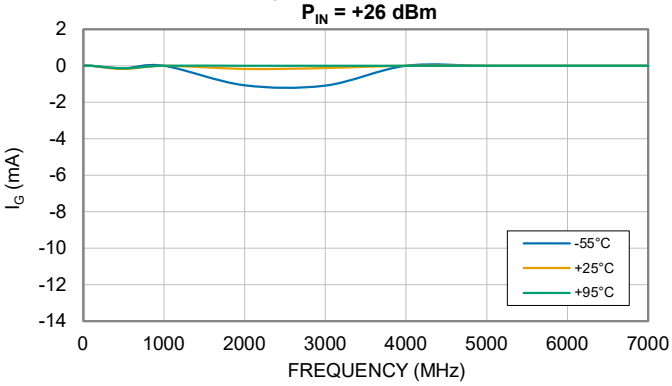
I_{DD} vs. P_{IN}
TEMPERATURE = +25°C



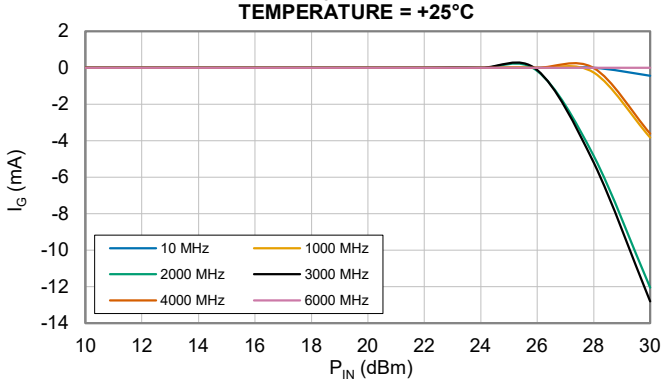
TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

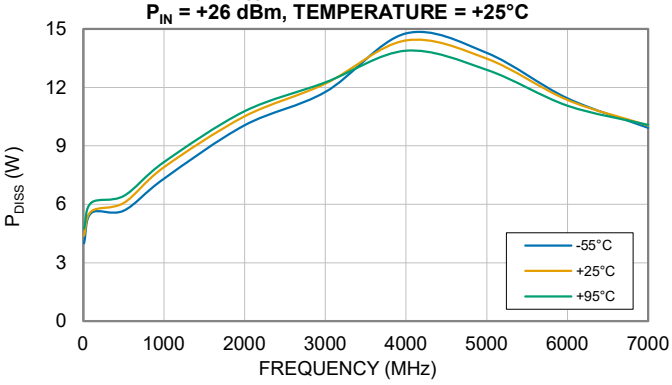
I_G vs. TEMPERATURE
P_{IN} = +26 dBm



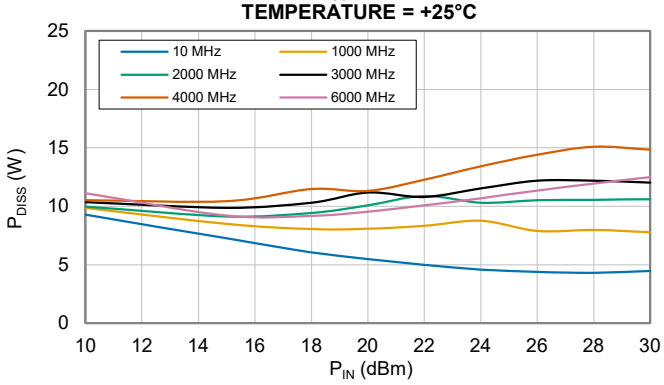
I_G vs. P_{IN}
TEMPERATURE = +25°C



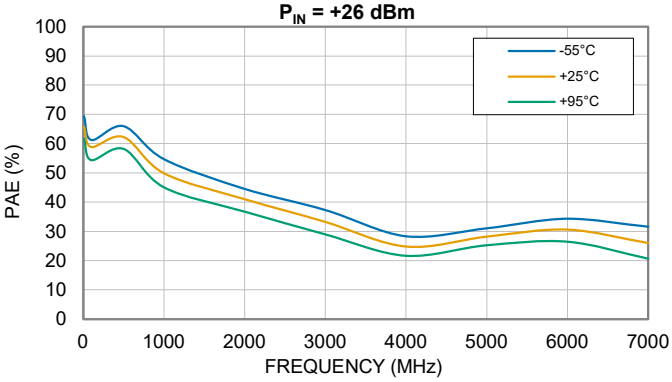
P_{DISS} vs. TEMPERATURE
P_{IN} = +26 dBm, TEMPERATURE = +25°C



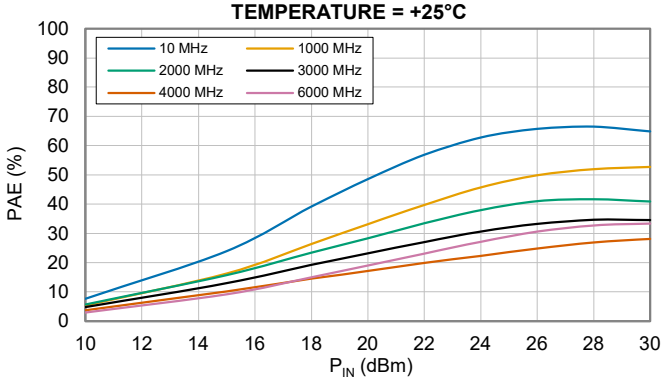
P_{DISS} vs. P_{IN}
TEMPERATURE = +25°C



PAE vs. TEMPERATURE
P_{IN} = +26 dBm



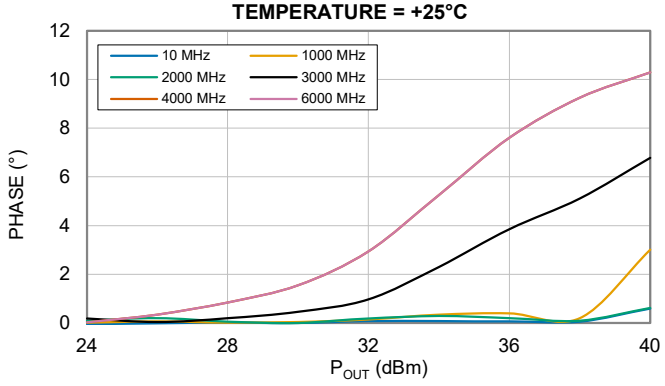
PAE vs. P_{IN}
TEMPERATURE = +25°C



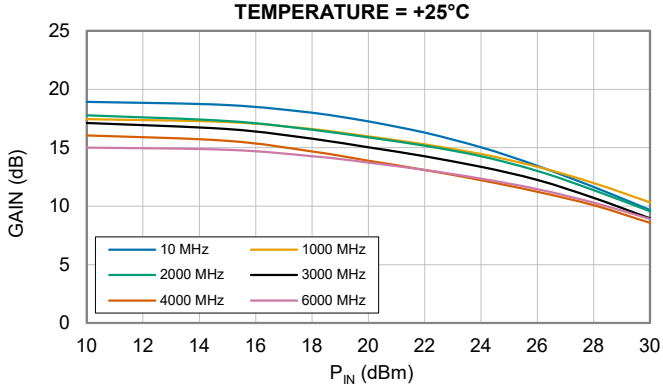
TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

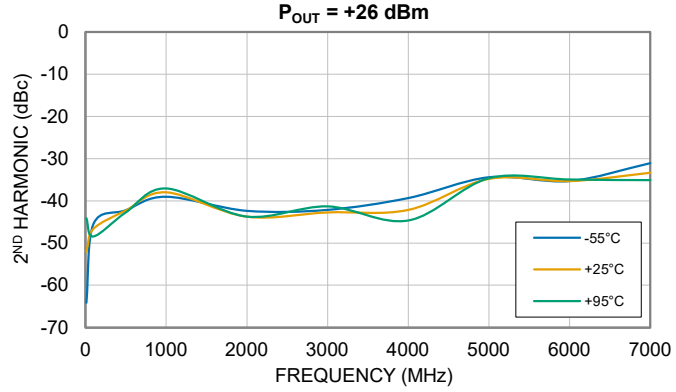
AM-PM
TEMPERATURE = +25°C



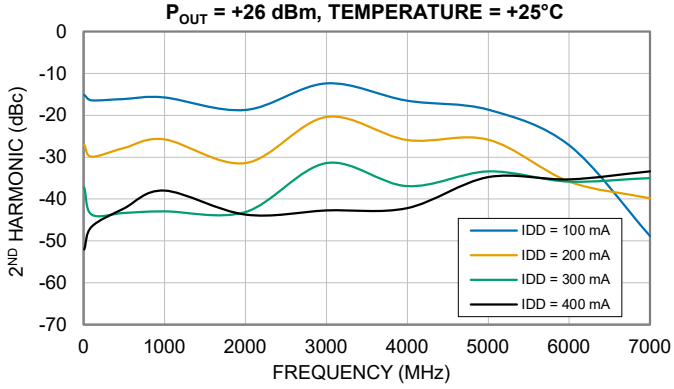
GAIN vs. P_{IN}
TEMPERATURE = +25°C



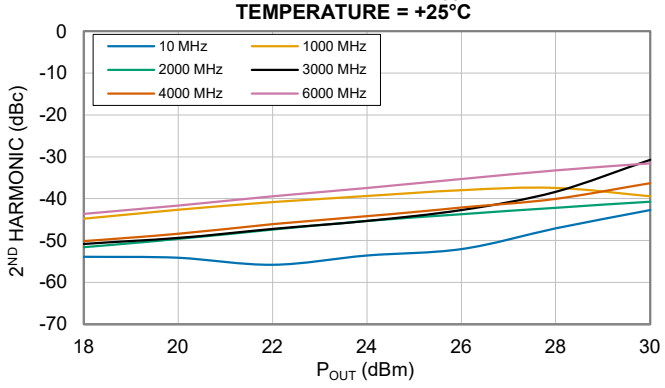
2ND HARMONIC vs. TEMPERATURE
P_{OUT} = +26 dBm



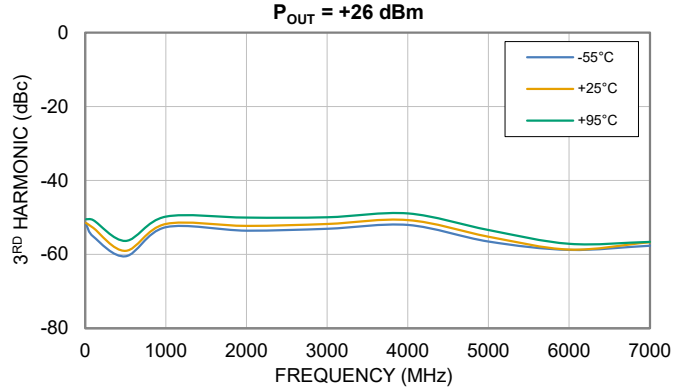
2ND HARMONIC vs. DEVICE CURRENT (I_{DD})
P_{OUT} = +26 dBm, TEMPERATURE = +25°C



2ND HARMONIC vs. P_{OUT}
TEMPERATURE = +25°C

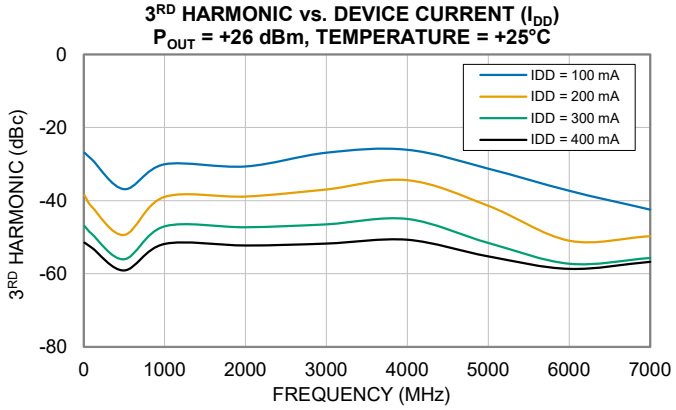


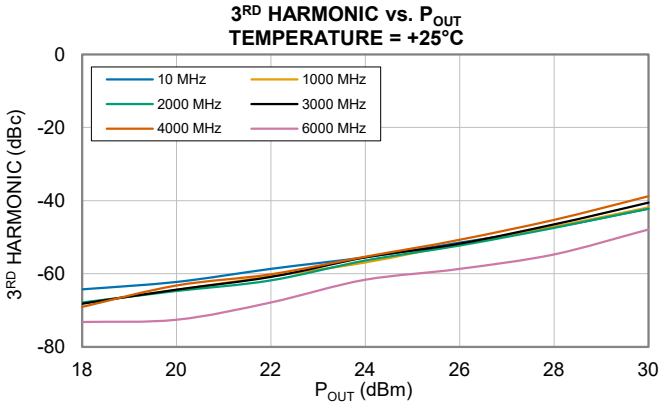
3RD HARMONIC vs. TEMPERATURE
P_{OUT} = +26 dBm



TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.





ABSOLUTE MAXIMUM RATINGS[6]

Parameter	Ratings
Operating Temperature	-55 °C to +95 °C
Storage Temperature	-65 °C to +150 °C
Junction Temperature[7]	+215 °C
Total Power Dissipation	16.9 W
Input Power (CW)	+36 dBm
DC Voltage on RF-OUT & V_{DD}	+45 V
DC Voltage on RF-IN	+15 V
DC Voltage on V_G	-5 V < V_G < 0 V
DC Current on RF-OUT & V_{DD}	1.2 A
DC Current V_G	-25 mA

6. Permanent damage may occur if any of these limits are exceeded. Maximum ratings are not intended for continuous normal operation.
7. Peak Temperature on top of Die.

THERMAL RESISTANCE

Parameter	Ratings
Thermal Resistance (Θ_{JC})[8]	7.1 °C/W

8. Θ_{JC} = (Hot Spot Temperature on Die - Temperature at Ground Lead) / Dissipated Power

ESD RATING

	Class	Voltage Range	Reference Standard
HBM	1A	250 V to < 500 V	ANSI/ESDA/JEDEC JS-001-2023
CDM	C1	250 V to < 500 V	ANSI/ESDA/JEDEC JS-002-2022

ESD HANDLING PRECAUTION: This device is designed to be Class 1A for HBM. Static charges may easily produce potentials higher than this with improper handling and can discharge into DUT and damage it. As a preventive measure Industry standard ESD handling precautions should be used at all times to protect the device from ESD damage.

MSL RATING

Moisture Sensitivity: MSL3 in accordance with IPC/JEDEC J-STD-020E /JEDEC J-STD-033C

Power Amplifier

GNA-63-5W+

50Ω 10 to 6000 MHz 6 W Output Power

FUNCTIONAL DIAGRAM

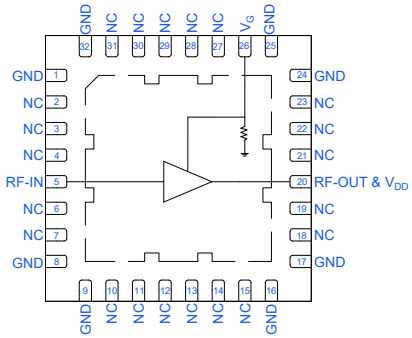


Figure 1. GNA-63-5W+ Functional Diagram

PAD DESCRIPTION

Function	Pad Number	Description (Refer to Figure 2)
RF-OUT & V_{DD}	20	RF-OUT & V_{DD} Pad connects to RF-Output port and voltage input port, $VD_{D.}$
RF-IN	5	RF-IN Pad connects to RF-Input port.
V_G	26	DC Input Pad connects to voltage input port, V_G.
NC	2-4, 6-7, 10-15, 18-19, 21-23, & 27-31	Not used internally. Connected to ground on test board.
GND	1, 8-9, 16-17, 24-25, 32, & Paddle	Connects to ground.

CHARACTERIZATION TEST BOARD

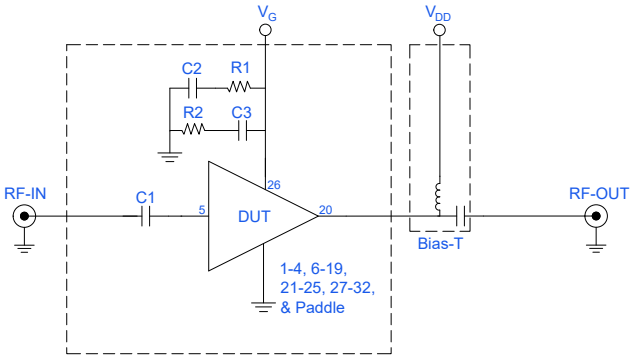


Figure 2. GNA-63-5W+ Characterization Circuit

Electrical Parameters and Conditions
Gain, Return Loss, Output Power at 1 dB Compression (P1dB), Output IP3 (OIP3), Power measurements, and Noise Figure measured using N5242A PNA-X microwave network analyzer. All data taken with test board assembly mounted on heatsink.

Conditions:
1. Gain and Return Loss: P_{IN} = -25 dBm
2. Output IP3 (OIP3): Two tones, spaced 1 MHz apart, +26 dBm/tone at output.
3. Power taken at P_{IN} = +26 dBm

Power ON/Power OFF Sequence:
Caution: Permanent damage to the device will occur if the Power ON and Power OFF sequences are not followed.

POWER ON:
1. Set V_G = -3 V and turn on.
2. Set V_{DD} = +28 V and turn on.
3. Increase V_G until I_{DD} = 400 mA.
4. Apply RF Signal.

POWER OFF:
1. Turn off RF signal.
2. Set V_G = -3 V and turn off V_{DD}.
3. Turn off V_G.

Component	Size	Value	Part Number	Manufacturer
R1-R2	0402	0Ω	RK73Z1ETTP	KOA Speer
C1	0402	1 nF	GRM1555C1H102GA01D	Murata
C2	1206	1 µF	12061C105KAT2A	AVX
C3	0402	100 pF	GRM1555C2A101JA01D	Murata

Power Amplifier

GNA-63-5W+

50Ω 10 to 6000 MHz 6 W Output Power

APPLICATION CIRCUIT

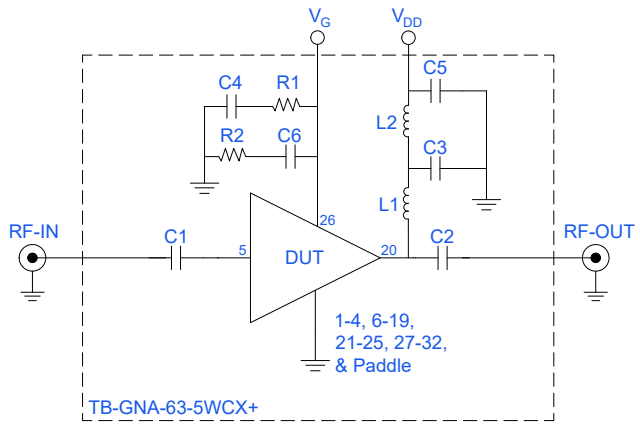


Figure 3. GNA-63-5W+ 500 MHz - 6000 MHz Evaluation and Application Circuit

Electrical Parameters and Conditions
Gain, Return Loss, Output Power at 1 dB Compression (P1dB), Output IP3 (OIP3), Power measurements, and Noise Figure measured using N5242A PNA-X microwave network analyzer. All data taken with test board assembly mounted on heatsink.

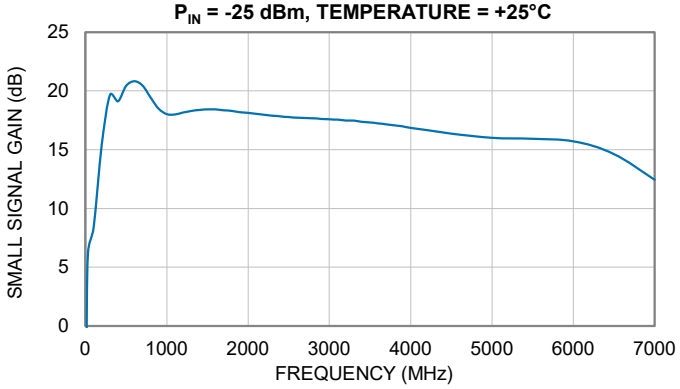
Conditions:
1. Gain and Return Loss: P_{IN} = -25 dBm
2. Power taken at P_{IN} = +26 dBm

Component	Size	Value	Part Number	Manufacturer
R1-R2	0402	0Ω	RK73Z1ETTP	KOA Speer
C1-C3	0402	1 nF	GRM1555C1H102GA01D	Murata
C4	1206	1 µF	12061C105KAT2A	AVX
C5	0402	0.1 µF	04025C104JAT2A	AVX
C6	0402	100 pF	GRM1555C2A101JA01D	Murata
L1	0402	18 nH	0402HP-18NXGRW	Coilcraft
L2	0402	47 nH	0603HC-47NXJRW	Coilcraft

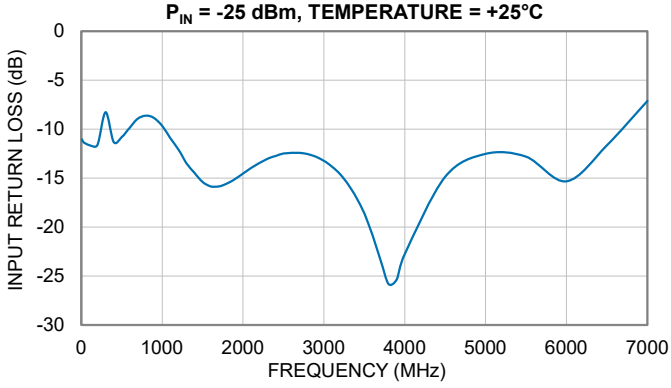
TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ (Figure 3). All data taken at nominal condition of V_{DD} = +28 V, I_{DD} = 400 mA, and Temperature = +25°C unless noted otherwise. V_G was adjusted to achieve I_{DD} = 400 mA.

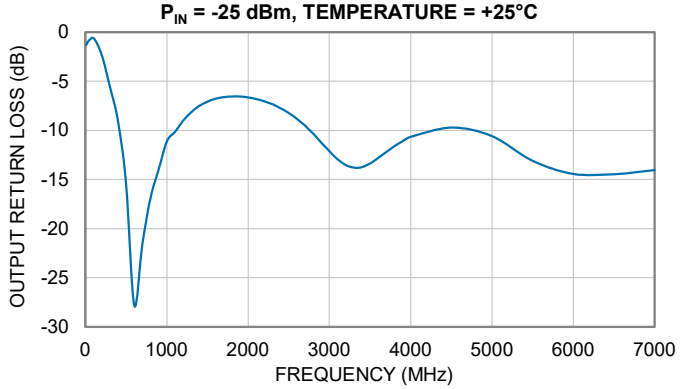
SMALL SIGNAL GAIN vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



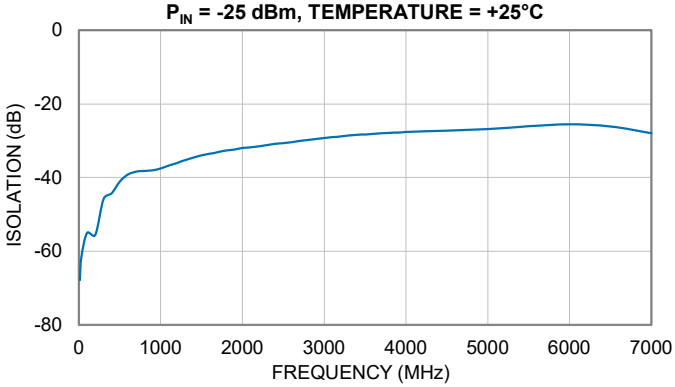
INPUT RETURN LOSS vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



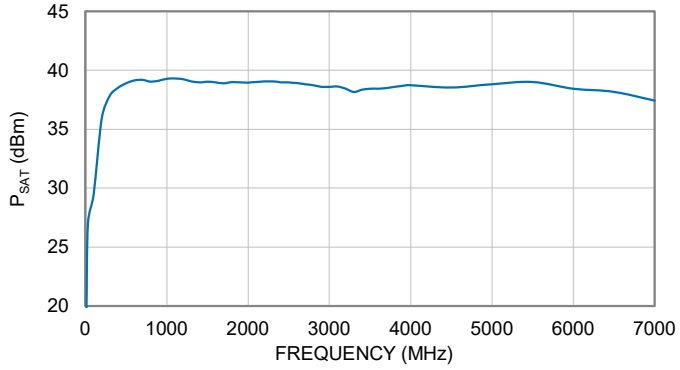
OUTPUT RETURN LOSS vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



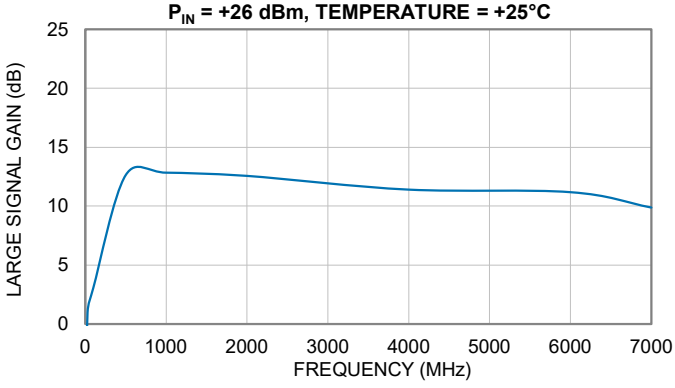
ISOLATION vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



P_{SAT} vs. FREQUENCY
TEMPERATURE = +25°C

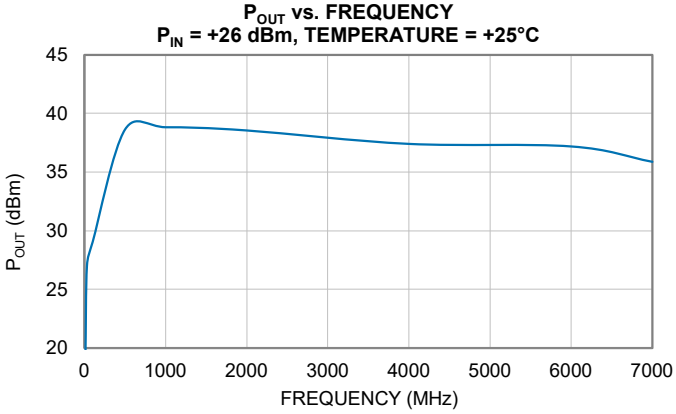


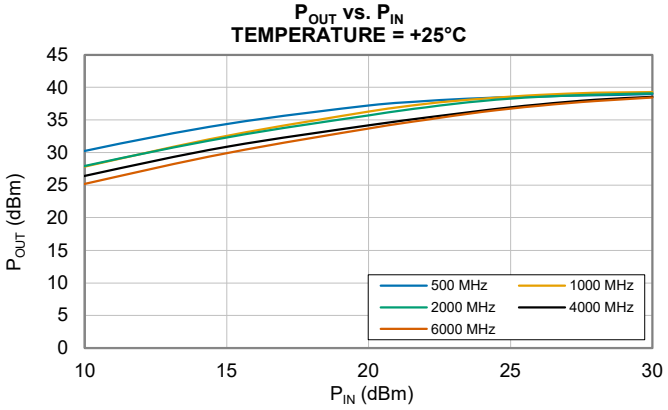
LARGE SIGNAL GAIN vs FREQUENCY
P_{IN} = +26 dBm, TEMPERATURE = +25°C



TYPICAL PERFORMANCE GRAPHS

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ (Figure 3). All data taken at nominal condition of V_{DD} = +28 V, I_{DD} = 400 mA, and Temperature = +25°C unless noted otherwise. V_G was adjusted to achieve I_{DD} = 400 mA.



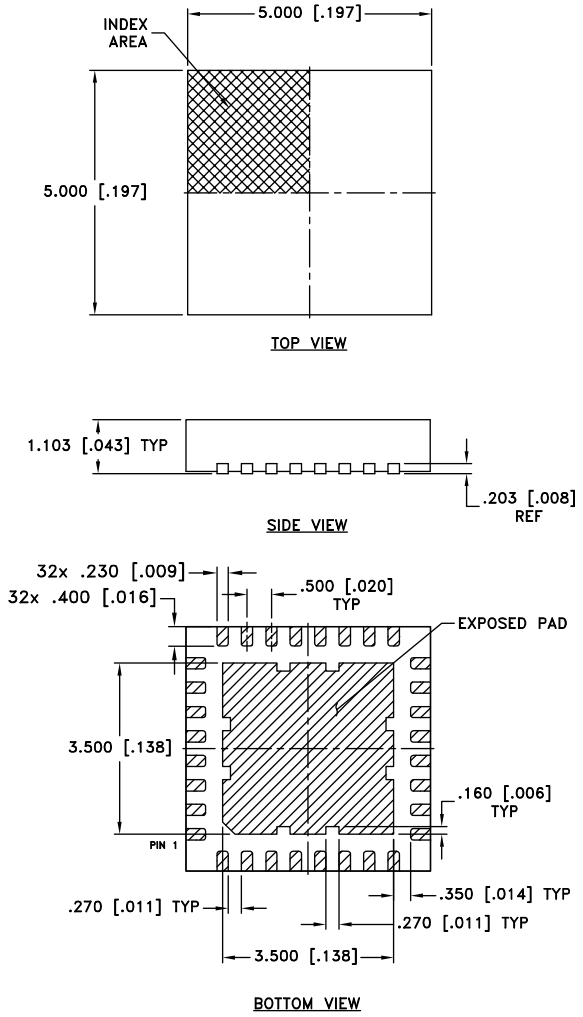


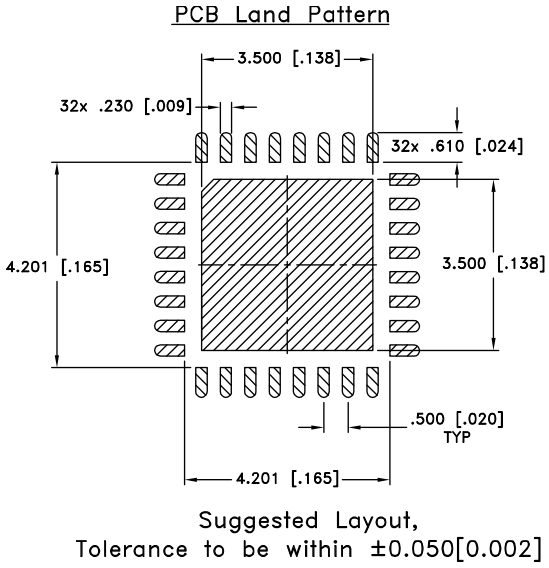
Power Amplifier

GNA-63-5W+

50Ω 10 to 6000 MHz 6 W Output Power

CASE STYLE DRAWING





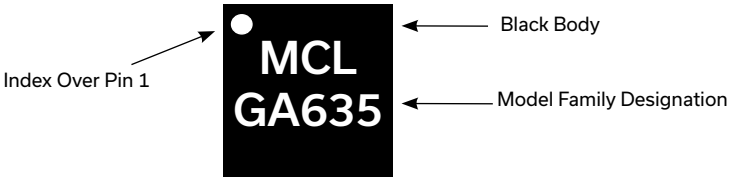
Suggested Layout,
Tolerance to be within ±0.050[0.002]

DENOTES METALLIZATION

Weight: .056 Grams

Dimensions are in mm [Inches]. Tolerances: 2 Pl. ± 0.254 [0.01]; 3 Pl. ± 0.127 [0.005] mm [inches]

PRODUCT MARKING



Marking may contain other features or characters for internal lot control.

Power Amplifier

GNA-63-5W+

50Ω 10 to 6000 MHz 6 W Output Power

ADDITIONAL DETAILED INFORMATION IS AVAILABLE ON OUR DASHBOARD CLICK HERE

Performance Data & Graphs	Data Graphs S-Parameter (S2P Files) Data Set (.zip file)
Case Style	DG1677-8 Plastic package, exposed paddle, Lead Finish: Nickel Palladium Gold
RoHS Status	Compliant
Tape & Reel **Standard Quantities Available on Reel**	F102 7" Reels with 20, 50, 100, 200, 500 devices 13" Reels with 1000 devices
Suggested Layout for PCB Design	PL-859
Evaluation Board	TB-GNA-63-5WCX+ Gerber File
Environmental Ratings	ENV08T10
Product Handling	The use of no-clean solder is recommended. This package cannot be subjected to aqueous wash.

NOTES

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits' standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +20 V, I_{DD} = 400 mA, V_G = -1.66 V, I_G = 0.01 mA, Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +26 dBm/Tone	1dB Comp. Output	P_{SAT} Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)
10	19.1	-51.8	-11.3	-8.7	17.3	0.9	38.7	34.8	37.1	19.6
100	18.8	-54.1	-12.5	-10.0	24.7	1.0	44.5	34.8	37.4	22.8
200	18.9	-48.7	-12.5	-10.7	13.3	1.0	43.3	34.3	37.3	20.5
300	19.5	-44.9	-12.1	-10.9	7.9	1.0	43.0	34.1	37.2	19.0
400	20.0	-41.7	-11.2	-10.8	5.1	1.0	42.6	34.2	37.5	20.8
500	19.9	-40.0	-10.2	-10.8	4.2	1.0	42.2	34.1	37.6	21.0
600	19.3	-39.0	-9.4	-10.9	3.9	1.0	37.7	34.0	37.4	21.1
700	18.4	-38.5	-8.9	-10.8	4.0	1.0	37.9	33.9	37.0	6.6
800	17.6	-38.1	-9.1	-10.5	4.2	1.0	38.2	33.8	37.0	6.3
900	17.2	-37.6	-9.3	-10.0	4.2	1.0	38.8	33.9	37.4	6.3
1000	17.1	-36.7	-9.8	-9.5	3.9	1.0	41.5	33.8	37.8	6.5
1100	17.2	-35.9	-10.6	-8.8	3.5	0.9	38.3	33.6	37.6	6.6
1200	17.5	-34.9	-11.4	-8.2	3.1	0.9	37.9	33.4	37.3	5.4
1300	17.8	-34.1	-12.4	-8.1	2.7	0.9	38.0	33.3	37.1	4.6
1400	18.0	-33.3	-13.3	-7.7	2.4	0.8	38.7	33.3	37.2	4.0
1500	18.1	-32.6	-14.0	-7.3	2.2	0.8	38.8	33.2	37.5	3.3
1600	18.1	-32.1	-14.5	-7.3	2.1	0.8	38.6	33.0	37.4	3.0
1700	18.1	-31.5	-14.7	-7.5	2.0	0.8	38.5	33.0	37.2	2.8
1800	18.1	-31.0	-14.6	-7.6	1.9	0.8	38.9	33.2	37.4	2.6
1900	18.1	-30.7	-14.2	-7.8	1.8	0.8	39.3	33.3	37.4	2.5
2000	18.0	-30.3	-13.8	-8.1	1.7	0.8	39.4	33.2	37.3	2.5
2100	18.0	-29.9	-13.3	-8.5	1.7	0.9	39.3	33.0	37.2	2.7
2200	17.9	-29.6	-12.9	-9.1	1.7	0.9	39.4	33.2	37.3	2.9
2300	17.8	-29.3	-12.5	-9.8	1.7	0.9	39.6	33.2	37.3	3.0
2400	17.8	-29.0	-12.3	-10.5	1.7	0.9	39.7	33.3	37.2	3.3
2500	17.7	-28.7	-12.1	-11.3	1.6	0.9	39.5	33.2	37.1	3.3
2600	17.6	-28.5	-12.0	-12.3	1.7	0.9	39.5	33.0	37.0	3.6
2700	17.5	-28.3	-12.0	-13.2	1.7	0.9	39.3	33.0	37.0	4.0
2800	17.4	-28.1	-12.2	-14.2	1.7	0.9	39.3	32.9	36.9	4.1
2900	17.3	-27.8	-12.4	-14.9	1.7	0.9	38.8	32.7	36.7	4.4
3000	17.2	-27.6	-12.8	-15.1	1.7	0.9	38.5	32.3	36.8	4.6
3100	17.1	-27.4	-13.4	-14.8	1.7	0.9	38.3	32.2	36.8	4.5
3200	17.0	-27.3	-14.0	-14.2	1.7	0.9	39.0	32.2	36.5	4.6
3300	16.9	-27.1	-14.9	-13.5	1.7	0.9	39.1	32.0	36.5	4.4
3400	16.8	-27.0	-15.9	-12.9	1.7	0.9	39.1	31.8	36.7	4.7
3500	16.7	-26.8	-17.1	-12.3	1.6	0.8	38.6	31.7	36.9	5.0
3600	16.6	-26.7	-18.4	-11.7	1.6	0.8	38.7	32.0	36.9	4.7
3700	16.5	-26.6	-19.4	-11.2	1.6	0.8	38.8	32.2	36.7	4.5
3800	16.4	-26.4	-19.9	-10.8	1.6	0.8	39.1	32.0	36.9	4.4
3900	16.3	-26.3	-19.7	-10.6	1.6	0.8	38.3	31.5	37.2	4.2
4000	16.3	-26.2	-18.8	-10.5	1.6	0.8	37.6	31.5	37.5	4.2
4200	16.1	-26.0	-16.3	-10.3	1.6	0.8	38.6	31.8	37.1	4.1
4400	15.9	-25.8	-14.2	-10.4	1.6	0.8	37.4	31.0	37.5	4.0
4600	15.7	-25.6	-12.9	-11.0	1.6	0.8	37.3	31.6	37.5	3.5
4800	15.6	-25.3	-12.1	-11.7	1.5	0.9	37.8	31.2	37.5	3.3
5000	15.5	-25.1	-11.7	-12.8	1.5	0.9	38.1	31.5	37.5	3.5
5200	15.4	-24.8	-11.9	-14.3	1.5	0.9	38.5	31.6	37.4	3.7
5400	15.4	-24.6	-12.8	-15.6	1.5	0.9	38.4	31.5	37.4	3.7
5600	15.2	-24.4	-14.5	-16.4	1.5	0.9	38.5	31.9	37.5	4.3
5800	15.0	-24.3	-17.2	-16.5	1.6	0.9	38.2	32.0	37.2	4.9
6000	14.5	-24.5	-19.0	-16.1	1.7	0.9	38.1	32.3	37.2	4.9
6500	12.4	-26.1	-10.9	-15.6	2.3	1.0	37.2	33.1	36.7	6.7
7000	9.6	-28.3	-6.6	-14.0	3.4	1.1	36.4	33.8	35.7	7.7

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +24 V, I_{DD} = 400 mA, V_G = -1.65 V, I_G = 0.01 mA, Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +26 dBm/Tone	1dB Comp. Output	P_{SAT} Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)
10	19.3	-61.5	-11.4	-7.5	49.0	0.9	46.9	35.3	38.3	19.8
100	19.1	-55.4	-12.5	-8.6	26.6	0.9	45.8	35.7	38.8	23.1
200	19.3	-50.1	-12.6	-9.4	14.5	0.9	44.9	35.3	38.7	20.4
300	19.9	-45.2	-12.2	-9.7	7.7	1.0	44.6	35.1	38.6	13.4
400	20.4	-42.5	-11.4	-10.0	5.2	1.0	44.2	35.1	38.9	14.3
500	20.4	-40.8	-10.4	-10.3	4.3	1.0	43.8	35.0	38.9	15.2
600	19.8	-39.7	-9.6	-10.7	4.0	1.0	43.0	34.9	38.7	21.3
700	18.9	-39.4	-9.1	-10.8	4.2	1.0	39.3	34.8	38.4	6.7
800	18.1	-38.9	-9.3	-10.5	4.4	1.0	43.2	34.7	38.3	6.4
900	17.7	-38.4	-9.6	-10.1	4.4	1.0	43.4	34.7	38.8	6.5
1000	17.6	-37.7	-10.1	-9.6	4.1	1.0	42.8	34.5	39.2	6.6
1100	17.7	-36.9	-10.9	-9.0	3.7	0.9	42.5	34.3	39.0	6.8
1200	18.0	-35.8	-11.9	-8.4	3.2	0.9	39.5	34.0	38.6	5.6
1300	18.2	-35.1	-12.9	-8.3	2.9	0.9	39.5	34.0	38.4	4.8
1400	18.4	-34.2	-13.9	-7.8	2.6	0.8	40.2	34.0	38.6	4.2
1500	18.5	-33.5	-14.7	-7.4	2.3	0.8	40.1	33.8	38.7	3.5
1600	18.5	-33.1	-15.1	-7.4	2.2	0.8	39.9	33.6	38.7	3.2
1700	18.5	-32.6	-15.3	-7.6	2.1	0.8	39.9	33.5	38.5	3.0
1800	18.5	-32.2	-15.0	-7.7	2.0	0.8	40.1	33.7	38.7	2.7
1900	18.4	-31.8	-14.5	-7.7	1.9	0.8	40.4	33.7	38.6	2.6
2000	18.4	-31.4	-13.9	-7.9	1.9	0.8	40.5	33.6	38.6	2.6
2100	18.3	-31.1	-13.3	-8.2	1.8	0.9	40.3	33.4	38.5	2.6
2200	18.2	-30.8	-12.8	-8.7	1.8	0.9	40.3	33.6	38.6	2.8
2300	18.1	-30.6	-12.5	-9.2	1.8	0.9	40.5	33.6	38.5	2.9
2400	18.0	-30.2	-12.2	-9.6	1.8	0.9	40.7	33.6	38.5	3.2
2500	17.9	-30.0	-12.0	-10.2	1.8	0.9	40.6	33.5	38.4	3.2
2600	17.8	-29.8	-12.0	-10.9	1.8	0.9	40.5	33.3	38.3	3.7
2700	17.8	-29.6	-12.0	-11.7	1.8	0.9	40.4	33.4	38.2	3.8
2800	17.7	-29.4	-12.2	-12.5	1.8	1.0	40.4	33.3	38.1	4.0
2900	17.6	-29.2	-12.5	-13.1	1.8	1.0	40.0	33.1	38.0	4.3
3000	17.5	-28.9	-12.9	-13.5	1.8	0.9	39.7	32.8	38.0	4.5
3100	17.4	-28.7	-13.5	-13.6	1.8	0.9	39.4	32.6	37.9	4.5
3200	17.3	-28.5	-14.2	-13.5	1.8	0.9	40.3	32.7	37.6	4.6
3300	17.2	-28.4	-15.2	-13.2	1.8	0.9	40.3	32.5	37.5	4.5
3400	17.2	-28.2	-16.3	-12.8	1.8	0.9	40.1	32.2	37.8	4.8
3500	17.1	-28.1	-17.7	-12.3	1.8	0.9	39.8	32.1	37.9	5.0
3600	17.0	-27.9	-19.1	-11.7	1.8	0.9	40.1	32.5	37.9	4.8
3700	16.9	-27.8	-20.4	-11.2	1.8	0.8	40.3	32.7	37.7	4.6
3800	16.8	-27.6	-21.0	-10.8	1.8	0.8	40.3	32.4	38.0	4.5
3900	16.7	-27.5	-20.8	-10.5	1.7	0.8	39.3	32.0	38.2	4.3
4000	16.6	-27.4	-19.7	-10.4	1.7	0.8	38.9	32.0	38.4	4.4
4200	16.4	-27.2	-17.0	-10.1	1.7	0.8	40.4	32.5	38.1	4.3
4400	16.2	-27.1	-14.8	-10.1	1.7	0.8	38.6	31.6	38.4	4.2
4600	16.1	-26.9	-13.4	-10.5	1.7	0.8	39.2	32.2	38.4	3.7
4800	15.9	-26.7	-12.5	-11.0	1.7	0.9	38.9	31.8	38.5	3.5
5000	15.8	-26.5	-12.1	-11.9	1.7	0.9	39.2	32.1	38.6	3.6
5200	15.7	-26.2	-12.1	-13.1	1.7	0.9	39.8	32.2	38.3	3.8
5400	15.7	-26.0	-12.5	-14.2	1.7	0.9	39.6	32.1	38.5	3.6
5600	15.6	-25.8	-13.5	-15.1	1.7	0.9	40.1	32.6	38.5	4.1
5800	15.5	-25.6	-15.0	-15.3	1.7	0.9	40.0	32.6	38.2	4.6
6000	15.3	-25.5	-16.7	-14.9	1.7	0.9	39.8	32.9	38.3	4.6
6500	13.8	-26.5	-12.1	-15.1	2.1	1.0	39.1	33.8	37.8	6.2
7000	11.3	-28.5	-7.3	-15.2	3.0	1.1	38.1	34.3	36.8	7.1

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:
Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA, Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +26 dBm/Tone	1dB Comp. Output	P_{SAT} Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)
10	19.0	-57.3	-11.4	-6.6	29.5	0.8	48.1	36.3	39.4	19.9
100	18.9	-57.2	-12.5	-7.4	32.0	0.9	46.7	36.4	40.0	22.0
200	19.1	-50.0	-12.6	-8.2	14.0	0.9	46.1	36.1	39.9	20.5
300	19.8	-45.7	-12.3	-8.7	7.9	0.9	46.0	35.9	39.7	13.5
400	20.4	-42.7	-11.6	-9.1	5.3	0.9	45.5	35.9	40.0	14.7
500	20.4	-40.7	-10.6	-9.6	4.2	1.0	45.1	35.9	40.1	15.9
600	19.8	-39.9	-9.7	-10.1	4.0	1.0	44.4	35.7	39.8	20.9
700	18.9	-39.6	-9.3	-10.2	4.3	1.0	44.7	35.7	39.5	6.8
800	18.1	-39.4	-9.5	-10.0	4.6	1.0	44.7	35.6	39.4	6.5
900	17.7	-38.5	-9.8	-9.8	4.4	1.0	44.6	35.4	39.9	6.6
1000	17.5	-37.9	-10.4	-9.4	4.2	1.0	43.8	35.1	40.2	6.8
1100	17.6	-36.9	-11.3	-8.7	3.7	0.9	43.6	34.8	40.1	7.0
1200	17.9	-36.0	-12.3	-8.2	3.3	0.9	43.4	34.6	39.7	5.7
1300	18.2	-35.1	-13.4	-8.3	2.9	0.9	43.4	34.6	39.5	5.0
1400	18.4	-34.4	-14.5	-7.6	2.6	0.8	43.8	34.6	39.6	4.4
1500	18.5	-33.7	-15.2	-7.2	2.4	0.8	41.1	34.3	39.7	3.7
1600	18.5	-33.2	-15.8	-7.3	2.2	0.8	42.5	34.0	39.6	3.4
1700	18.4	-32.8	-15.8	-7.5	2.2	0.8	42.3	34.0	39.4	3.1
1800	18.4	-32.4	-15.4	-7.5	2.1	0.8	41.1	34.1	39.6	2.8
1900	18.3	-32.0	-14.8	-7.5	2.0	0.8	41.4	34.2	39.6	2.7
2000	18.2	-31.7	-14.1	-7.6	1.9	0.8	42.8	34.0	39.5	2.7
2100	18.2	-31.4	-13.4	-7.9	1.9	0.9	40.9	33.8	39.5	2.7
2200	18.1	-31.1	-12.9	-8.3	1.9	0.9	40.9	33.9	39.6	2.8
2300	18.0	-30.9	-12.5	-8.8	1.9	0.9	41.1	33.9	39.5	2.9
2400	17.8	-30.6	-12.2	-9.1	1.8	0.9	42.3	34.0	39.4	3.1
2500	17.7	-30.4	-12.0	-9.5	1.8	0.9	42.3	33.8	39.3	3.1
2600	17.6	-30.2	-12.0	-10.1	1.8	0.9	42.2	33.6	39.2	3.4
2700	17.6	-30.0	-12.0	-10.7	1.9	0.9	42.1	33.7	39.1	3.7
2800	17.5	-29.7	-12.2	-11.4	1.9	0.9	42.0	33.6	39.0	3.9
2900	17.4	-29.5	-12.5	-11.9	1.9	0.9	42.0	33.4	38.9	4.2
3000	17.3	-29.3	-13.0	-12.2	1.9	0.9	41.8	33.1	38.8	4.5
3100	17.2	-29.1	-13.6	-12.3	1.9	0.9	41.4	33.0	38.6	4.5
3200	17.1	-28.9	-14.3	-12.4	1.9	0.9	41.2	33.1	38.3	4.6
3300	17.1	-28.7	-15.3	-12.2	1.9	0.9	41.1	32.9	38.4	4.6
3400	17.0	-28.6	-16.6	-11.9	1.9	0.9	40.7	32.5	38.6	4.8
3500	16.9	-28.4	-18.1	-11.5	1.9	0.9	40.5	32.4	38.6	5.2
3600	16.8	-28.2	-19.7	-11.0	1.8	0.9	41.0	32.8	38.6	4.9
3700	16.8	-28.1	-21.1	-10.5	1.8	0.8	41.4	33.1	38.5	4.7
3800	16.7	-28.0	-21.9	-10.1	1.8	0.8	41.1	32.7	38.7	4.7
3900	16.6	-27.9	-21.6	-9.9	1.8	0.8	40.0	32.3	38.8	4.5
4000	16.5	-27.8	-20.2	-9.8	1.8	0.8	39.7	32.4	39.0	4.5
4200	16.3	-27.6	-17.2	-9.5	1.8	0.8	41.7	33.0	38.9	4.5
4400	16.1	-27.4	-15.0	-9.5	1.8	0.8	39.4	32.0	39.0	4.4
4600	16.0	-27.2	-13.6	-9.9	1.8	0.8	40.5	32.7	39.0	3.9
4800	15.8	-27.1	-12.7	-10.3	1.8	0.8	39.7	32.2	39.1	3.7
5000	15.7	-26.8	-12.3	-11.3	1.8	0.9	40.2	32.6	39.2	3.8
5200	15.7	-26.6	-12.1	-12.4	1.7	0.9	40.8	32.6	39.0	4.0
5400	15.6	-26.3	-12.4	-13.3	1.7	0.9	40.4	32.6	39.3	3.6
5600	15.5	-26.1	-12.9	-14.1	1.7	0.9	41.2	33.1	39.3	4.0
5800	15.4	-25.9	-14.0	-14.2	1.7	0.9	41.1	33.1	39.0	4.4
6000	15.3	-25.8	-15.1	-13.6	1.7	0.9	40.9	33.4	39.2	4.4
6500	14.1	-26.5	-12.4	-14.0	2.0	0.9	40.6	34.3	38.6	6.0
7000	11.9	-28.2	-7.6	-15.2	2.8	1.1	39.6	35.0	37.7	6.8

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 300 mA, V_G = -1.85 V, I_G = 0.01 mA, Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +26 dBm/Tone	1dB Comp. Output	P_{SAT} Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)
10	19.4	-56.7	-11.3	-6.5	26.1	0.8	44.8	33.7	39.3	19.7
100	19.3	-57.9	-12.5	-7.3	32.7	0.9	43.6	33.8	39.8	23.7
200	19.5	-50.5	-12.6	-8.1	14.0	0.9	43.0	33.6	39.8	20.4
300	20.2	-46.4	-12.3	-8.6	8.2	0.9	42.8	33.5	39.6	13.5
400	20.8	-43.3	-11.5	-9.0	5.4	0.9	42.3	33.5	39.9	14.6
500	20.8	-41.2	-10.6	-9.5	4.2	1.0	41.9	33.4	39.9	15.7
600	20.2	-40.4	-9.7	-10.0	4.0	1.0	41.2	33.5	39.7	21.0
700	19.4	-39.9	-9.3	-10.2	4.2	1.0	41.6	33.5	39.4	6.7
800	18.5	-39.5	-9.4	-10.0	4.4	1.0	41.9	33.5	39.3	6.4
900	18.1	-39.0	-9.8	-9.7	4.4	1.0	41.5	33.0	39.7	6.4
1000	18.0	-38.4	-10.3	-9.3	4.2	1.0	40.7	32.6	40.1	6.7
1100	18.1	-37.5	-11.2	-8.8	3.8	0.9	40.3	32.4	40.0	6.9
1200	18.3	-36.6	-12.2	-8.3	3.4	0.9	40.1	32.2	39.6	5.7
1300	18.6	-35.7	-13.3	-8.2	3.0	0.9	40.2	32.1	39.4	4.9
1400	18.7	-34.9	-14.4	-7.8	2.7	0.8	41.1	32.1	39.5	4.2
1500	18.8	-34.3	-15.1	-7.5	2.4	0.8	40.6	31.8	39.7	3.5
1600	18.8	-33.8	-15.6	-7.4	2.3	0.8	39.5	31.6	39.5	3.3
1700	18.8	-33.4	-15.7	-7.5	2.2	0.8	40.5	31.6	39.4	3.0
1800	18.8	-33.0	-15.3	-7.6	2.1	0.8	39.9	31.7	39.5	2.7
1900	18.7	-32.6	-14.7	-7.6	2.0	0.8	40.0	31.8	39.5	2.6
2000	18.6	-32.3	-14.0	-7.7	2.0	0.8	40.1	31.6	39.5	2.5
2100	18.5	-32.0	-13.4	-7.9	1.9	0.9	39.9	31.3	39.4	2.5
2200	18.4	-31.8	-12.8	-8.3	1.9	0.9	39.9	31.5	39.5	2.7
2300	18.3	-31.5	-12.4	-8.6	1.9	0.9	39.8	31.5	39.4	2.7
2400	18.2	-31.2	-12.2	-8.9	1.9	0.9	40.0	31.5	39.4	3.0
2500	18.1	-31.1	-12.0	-9.4	1.9	0.9	39.9	31.4	39.2	2.9
2600	18.0	-30.9	-11.9	-9.9	1.9	0.9	39.7	31.1	39.1	3.2
2700	17.9	-30.6	-12.0	-10.5	1.9	0.9	39.5	31.2	39.0	3.6
2800	17.8	-30.3	-12.2	-11.1	1.9	0.9	39.5	31.2	38.9	3.7
2900	17.8	-30.2	-12.5	-11.6	1.9	0.9	39.3	30.9	38.8	4.0
3000	17.7	-30.0	-13.0	-12.0	1.9	0.9	39.0	30.6	38.7	4.3
3100	17.6	-29.8	-13.6	-12.2	1.9	0.9	38.4	30.5	38.3	4.3
3200	17.5	-29.6	-14.3	-12.3	1.9	0.9	38.3	30.6	38.0	4.4
3300	17.5	-29.3	-15.3	-12.2	1.9	0.9	38.3	30.4	38.3	4.4
3400	17.4	-29.2	-16.5	-12.0	1.9	0.9	37.7	30.0	38.4	4.6
3500	17.3	-29.0	-18.0	-11.7	1.9	0.9	37.5	30.0	38.4	4.9
3600	17.2	-28.9	-19.5	-11.2	1.9	0.9	37.8	30.3	38.4	4.8
3700	17.1	-28.8	-20.9	-10.8	1.9	0.8	38.4	30.7	38.4	4.5
3800	17.1	-28.6	-21.8	-10.4	1.9	0.8	38.0	30.3	38.5	4.5
3900	17.0	-28.5	-21.5	-10.2	1.9	0.8	37.2	29.9	38.6	4.3
4000	16.9	-28.4	-20.3	-10.0	1.8	0.8	37.2	29.9	38.8	4.3
4200	16.7	-28.2	-17.4	-9.6	1.8	0.8	38.4	30.6	38.8	4.3
4400	16.5	-28.1	-15.2	-9.6	1.8	0.8	37.2	29.7	38.9	4.2
4600	16.3	-28.0	-13.8	-9.9	1.8	0.8	37.8	30.4	38.9	3.7
4800	16.2	-27.8	-12.9	-10.3	1.8	0.9	37.6	29.9	39.0	3.4
5000	16.0	-27.7	-12.4	-11.1	1.9	0.9	38.0	30.3	39.1	3.6
5200	16.0	-27.4	-12.2	-12.1	1.8	0.9	38.4	30.3	38.8	3.7
5400	15.9	-27.1	-12.4	-13.2	1.8	0.9	38.3	30.2	39.2	3.4
5600	15.9	-26.9	-13.0	-14.1	1.8	0.9	38.8	30.8	39.2	3.7
5800	15.8	-26.7	-14.0	-14.4	1.8	0.9	38.8	30.8	38.9	4.1
6000	15.7	-26.5	-15.2	-14.1	1.8	0.9	38.7	31.2	39.1	4.1
6500	14.7	-27.0	-12.9	-14.0	2.0	0.9	39.0	32.6	38.5	5.7
7000	12.6	-28.7	-7.8	-15.6	2.7	1.1	38.9	34.0	37.6	6.5

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -2 V, I_G = 0.01 mA, Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +26 dBm/Tone	1dB Comp. Output	P_{SAT} Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)
10	19.3	-59.5	-11.4	-6.1	36.4	0.8	40.3	29.3	39.2	19.5
100	19.1	-56.6	-12.5	-6.9	28.3	0.8	39.4	30.4	39.6	23.7
200	19.3	-50.4	-12.6	-7.7	13.9	0.9	39.3	30.4	39.7	20.4
300	20.1	-46.2	-12.3	-8.1	8.0	0.9	39.4	30.3	39.5	13.4
400	20.6	-42.8	-11.6	-8.6	5.1	0.9	39.2	30.3	39.7	14.4
500	20.6	-41.2	-10.6	-9.1	4.2	1.0	39.2	30.3	39.9	15.4
600	20.1	-40.2	-9.7	-9.6	4.0	1.0	38.9	30.4	39.7	21.5
700	19.2	-39.6	-9.3	-9.8	4.1	1.0	39.3	30.6	39.3	6.6
800	18.4	-39.3	-9.5	-9.7	4.3	1.0	39.7	30.5	39.2	6.3
900	17.9	-38.9	-9.8	-9.4	4.4	1.0	39.3	30.0	39.7	6.3
1000	17.8	-38.2	-10.4	-9.0	4.2	1.0	38.6	29.5	40.1	6.6
1100	17.9	-37.3	-11.3	-8.6	3.8	0.9	38.2	29.2	40.0	6.8
1200	18.2	-36.3	-12.3	-8.2	3.3	0.9	38.2	29.0	39.6	5.6
1300	18.4	-35.7	-13.5	-8.0	3.0	0.9	38.2	29.0	39.3	4.8
1400	18.6	-34.9	-14.6	-7.6	2.7	0.8	41.5	29.0	39.5	4.1
1500	18.7	-34.2	-15.4	-7.4	2.5	0.8	40.8	28.7	39.6	3.5
1600	18.7	-33.7	-15.8	-7.3	2.3	0.8	37.8	28.5	39.5	3.2
1700	18.7	-33.3	-15.9	-7.4	2.2	0.8	40.9	28.5	39.3	2.9
1800	18.6	-32.9	-15.5	-7.4	2.1	0.8	39.8	28.6	39.5	2.6
1900	18.5	-32.5	-14.9	-7.4	2.0	0.8	39.3	28.7	39.5	2.5
2000	18.5	-32.3	-14.1	-7.5	2.0	0.8	38.4	28.5	39.4	2.4
2100	18.4	-31.9	-13.5	-7.7	1.9	0.9	39.7	28.3	39.4	2.4
2200	18.3	-31.7	-12.9	-8.0	1.9	0.9	39.5	28.5	39.4	2.5
2300	18.2	-31.4	-12.5	-8.3	1.9	0.9	39.0	28.5	39.3	2.6
2400	18.1	-31.2	-12.2	-8.6	1.9	0.9	38.5	28.5	39.3	2.8
2500	18.0	-31.1	-12.0	-9.0	1.9	0.9	38.4	28.3	39.2	2.8
2600	17.9	-30.7	-11.9	-9.5	1.9	0.9	38.3	28.1	39.0	3.0
2700	17.8	-30.6	-12.0	-10.0	1.9	0.9	38.2	28.2	38.9	3.4
2800	17.7	-30.3	-12.2	-10.6	1.9	0.9	38.3	28.0	38.8	3.6
2900	17.6	-30.1	-12.5	-11.1	1.9	0.9	38.0	27.8	38.7	3.8
3000	17.5	-29.9	-12.9	-11.4	1.9	0.9	37.9	27.5	38.6	4.2
3100	17.4	-29.7	-13.5	-11.6	1.9	0.9	37.7	27.3	38.2	4.1
3200	17.4	-29.5	-14.3	-11.7	1.9	0.9	37.0	27.4	37.9	4.2
3300	17.3	-29.3	-15.3	-11.7	1.9	0.9	36.9	27.1	38.2	4.2
3400	17.2	-29.1	-16.5	-11.5	1.9	0.9	36.6	26.8	38.3	4.5
3500	17.1	-29.0	-18.0	-11.2	1.9	0.9	36.5	26.7	38.3	4.8
3600	17.1	-28.8	-19.5	-10.8	1.9	0.9	36.5	27.1	38.2	4.6
3700	17.0	-28.7	-21.1	-10.4	1.9	0.8	36.7	27.4	38.2	4.4
3800	16.9	-28.5	-21.9	-10.1	1.9	0.8	36.7	27.1	38.4	4.3
3900	16.8	-28.4	-21.7	-9.8	1.8	0.8	36.7	26.7	38.5	4.2
4000	16.7	-28.4	-20.5	-9.6	1.8	0.8	36.7	26.8	38.7	4.2
4200	16.6	-28.1	-17.5	-9.3	1.8	0.8	37.0	27.4	38.6	4.2
4400	16.4	-28.0	-15.2	-9.3	1.8	0.8	36.9	26.6	38.8	4.0
4600	16.2	-27.9	-13.8	-9.5	1.8	0.8	37.1	27.3	38.8	3.6
4800	16.1	-27.7	-12.9	-9.9	1.8	0.8	37.4	26.9	39.0	3.4
5000	15.9	-27.5	-12.4	-10.7	1.8	0.9	37.6	27.3	39.1	3.5
5200	15.9	-27.3	-12.2	-11.6	1.8	0.9	37.9	27.3	38.7	3.6
5400	15.8	-27.0	-12.4	-12.7	1.8	0.9	38.0	27.3	39.2	3.2
5600	15.8	-26.8	-12.9	-13.6	1.8	0.9	38.2	27.9	39.1	3.5
5800	15.8	-26.5	-13.7	-13.8	1.8	0.9	38.3	27.9	38.8	3.9
6000	15.7	-26.3	-14.9	-13.5	1.7	0.9	38.1	28.3	39.1	3.9
6500	14.8	-26.7	-13.1	-13.3	2.0	0.9	38.2	30.1	38.5	5.4
7000	12.7	-28.4	-8.1	-14.9	2.6	1.1	38.7	32.7	37.6	6.2

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -2.1 V, I_G = 0.01 mA, Temperature = +25°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +26 dBm/Tone	1dB Comp. Output	P_{SAT} Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)
10	18.2	-57.3	-11.4	-5.2	28.9	0.8	39.3	25.2	38.7	26.5
100	18.1	-55.2	-12.6	-5.8	25.0	0.8	38.9	25.8	39.5	20.0
200	18.4	-50.1	-12.7	-6.5	14.0	0.8	38.8	26.0	39.5	18.6
300	19.2	-45.0	-12.5	-6.9	7.3	0.9	38.8	26.2	39.4	14.8
400	19.8	-42.8	-11.8	-7.4	5.3	0.9	39.0	26.2	39.7	12.2
500	19.9	-40.7	-10.8	-7.9	4.1	0.9	39.1	26.3	39.8	18.1
600	19.4	-39.7	-9.9	-8.5	3.9	1.0	39.1	26.7	39.6	23.9
700	18.5	-38.9	-9.5	-8.7	4.0	1.0	39.2	26.8	39.2	7.2
800	17.7	-38.8	-9.7	-8.7	4.3	1.0	39.5	26.7	39.1	7.6
900	17.2	-38.1	-10.1	-8.5	4.3	0.9	39.2	25.9	39.6	7.8
1000	17.1	-37.5	-10.7	-8.2	4.1	0.9	39.2	25.5	40.1	5.8
1100	17.2	-36.7	-11.6	-7.8	3.7	0.9	39.2	25.1	39.9	5.0
1200	17.4	-35.7	-12.7	-7.5	3.3	0.9	39.5	24.8	39.5	5.8
1300	17.6	-35.0	-14.0	-7.4	3.0	0.8	39.3	24.7	39.3	1.2
1400	17.8	-34.2	-15.3	-7.1	2.7	0.8	42.4	24.8	39.4	1.9
1500	17.9	-33.6	-16.2	-6.9	2.4	0.8	42.1	24.6	39.6	-6.3
1600	17.9	-33.1	-16.8	-6.9	2.3	0.8	39.0	24.4	39.4	5.9
1700	17.8	-32.6	-16.9	-6.9	2.2	0.8	41.9	24.5	39.3	2.9
1800	17.8	-32.2	-16.4	-6.9	2.1	0.8	40.6	24.6	39.5	1.8
1900	17.7	-31.9	-15.5	-6.9	2.0	0.8	40.1	24.9	39.4	2.5
2000	17.6	-31.7	-14.6	-7.0	2.0	0.8	39.5	24.8	39.3	1.9
2100	17.5	-31.3	-13.9	-7.1	1.9	0.8	40.7	24.4	39.3	3.7
2200	17.4	-31.1	-13.2	-7.4	1.9	0.8	40.3	24.9	39.4	2.3
2300	17.3	-30.9	-12.7	-7.6	1.9	0.9	39.6	24.9	39.2	-4.4
2400	17.2	-30.6	-12.3	-7.8	1.9	0.9	39.7	25.0	39.2	6.7
2500	17.1	-30.4	-12.1	-8.2	1.9	0.9	39.6	24.7	39.1	1.9
2600	17.0	-30.2	-12.0	-8.5	1.9	0.9	39.6	24.3	38.9	-2.2
2700	16.9	-30.0	-12.0	-8.9	1.9	0.9	39.9	24.3	38.8	2.6
2800	16.8	-29.8	-12.2	-9.4	1.9	0.9	39.7	24.1	38.7	0.6
2900	16.7	-29.6	-12.5	-9.7	1.9	0.9	39.7	23.8	38.7	4.5
3000	16.6	-29.4	-12.9	-10.0	1.9	0.9	39.4	23.3	38.6	3.2
3100	16.5	-29.2	-13.5	-10.2	1.9	0.9	38.7	22.8	38.0	3.9
3200	16.4	-29.0	-14.3	-10.2	1.9	0.9	38.2	22.8	37.6	4.0
3300	16.4	-28.8	-15.3	-10.2	1.9	0.9	38.0	22.5	38.1	4.4
3400	16.3	-28.6	-16.5	-10.1	1.9	0.9	37.9	22.1	38.1	4.8
3500	16.2	-28.4	-18.1	-9.8	1.9	0.9	37.8	22.0	38.1	5.3
3600	16.2	-28.3	-19.8	-9.5	1.9	0.8	37.6	22.3	38.0	4.9
3700	16.1	-28.1	-21.4	-9.2	1.9	0.8	37.6	22.8	38.0	3.7
3800	16.0	-27.9	-22.5	-8.9	1.8	0.8	37.9	22.5	38.2	5.0
3900	16.0	-27.8	-22.2	-8.7	1.8	0.8	38.2	22.2	38.3	4.0
4000	15.9	-27.7	-20.8	-8.5	1.8	0.8	38.0	22.3	38.5	3.7
4200	15.8	-27.5	-17.6	-8.2	1.8	0.8	37.9	23.0	38.4	4.1
4400	15.6	-27.3	-15.2	-8.2	1.8	0.8	38.4	22.2	38.7	4.2
4600	15.5	-27.1	-13.7	-8.4	1.8	0.8	38.3	22.8	38.7	3.3
4800	15.4	-26.9	-12.9	-8.8	1.8	0.8	38.8	22.6	38.9	9.7
5000	15.3	-26.7	-12.4	-9.5	1.8	0.8	38.9	23.2	39.0	3.2
5200	15.2	-26.5	-12.2	-10.3	1.8	0.9	39.2	23.2	38.5	3.5
5400	15.2	-26.3	-12.3	-11.2	1.8	0.9	39.5	23.3	39.2	2.5
5600	15.2	-26.0	-12.6	-12.0	1.7	0.9	39.3	24.0	39.1	3.0
5800	15.2	-25.6	-13.2	-12.3	1.7	0.9	39.4	23.7	38.7	3.8
6000	15.2	-25.4	-14.0	-12.0	1.7	0.9	39.2	24.2	39.1	3.6
6500	14.4	-25.6	-13.3	-11.4	1.8	0.9	39.0	26.3	38.4	5.3
7000	12.6	-26.9	-8.7	-12.8	2.3	1.0	39.1	31.2	37.6	4.9

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.77 V, I_G = 0.01 mA, Temperature = -55°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +26 dBm/Tone	1dB Comp. Output	P_{SAT} Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)
10	20.6	-55.3	-11.4	-7.1	20.4	0.9	46.8	35.7	39.6	19.9
100	20.3	-57.2	-12.5	-8.1	27.8	0.9	46.5	35.7	40.2	23.8
200	20.6	-52.2	-12.5	-8.9	15.6	0.9	45.8	35.5	40.1	19.8
300	21.3	-47.4	-12.1	-9.3	8.3	0.9	45.7	35.3	39.8	13.5
400	21.8	-44.5	-11.3	-9.7	5.6	1.0	45.2	35.2	40.1	14.1
500	21.8	-42.7	-10.3	-10.1	4.5	1.0	44.7	35.2	40.1	14.8
600	21.2	-41.6	-9.4	-10.6	4.2	1.0	44.0	35.3	40.0	21.1
700	20.4	-41.0	-8.9	-10.7	4.2	1.0	44.4	35.3	39.6	6.2
800	19.5	-40.8	-9.1	-10.5	4.6	1.0	44.4	35.2	39.5	5.8
900	19.1	-40.3	-9.4	-10.2	4.6	1.0	44.1	34.9	39.9	5.8
1000	19.0	-39.7	-9.9	-9.8	4.4	1.0	43.2	34.5	40.3	6.1
1100	19.1	-38.7	-10.7	-9.1	3.9	0.9	43.0	34.2	40.2	6.2
1200	19.4	-37.8	-11.6	-8.6	3.4	0.9	42.8	34.2	39.9	5.1
1300	19.6	-37.0	-12.7	-8.6	3.1	0.9	42.9	34.2	39.6	4.4
1400	19.8	-36.1	-13.7	-8.0	2.7	0.9	43.4	34.2	39.8	3.7
1500	19.9	-35.5	-14.4	-7.6	2.5	0.8	42.8	33.9	39.9	3.1
1600	19.9	-35.0	-14.9	-7.6	2.4	0.8	42.1	33.6	39.7	2.8
1700	19.9	-34.6	-15.0	-7.8	2.3	0.8	41.9	33.6	39.6	2.5
1800	19.8	-34.1	-14.7	-7.7	2.1	0.8	40.8	33.8	39.7	2.2
1900	19.8	-33.9	-14.2	-7.7	2.1	0.8	41.2	33.8	39.7	2.2
2000	19.7	-33.5	-13.5	-7.8	2.0	0.9	42.4	33.6	39.6	2.0
2100	19.6	-33.3	-13.0	-8.0	2.0	0.9	41.7	33.4	39.6	2.1
2200	19.5	-32.9	-12.5	-8.4	1.9	0.9	40.7	33.6	39.7	2.2
2300	19.4	-32.7	-12.2	-8.8	1.9	0.9	41.0	33.6	39.6	2.3
2400	19.4	-32.5	-11.9	-9.1	1.9	0.9	41.8	33.6	39.6	2.5
2500	19.3	-32.3	-11.8	-9.4	1.9	0.9	41.7	33.5	39.5	2.4
2600	19.2	-32.1	-11.7	-10.0	1.9	0.9	41.8	33.3	39.5	2.8
2700	19.1	-31.8	-11.8	-10.6	1.9	0.9	41.7	33.4	39.4	3.0
2800	19.0	-31.6	-12.0	-11.2	1.9	1.0	41.6	33.3	39.3	3.2
2900	18.9	-31.4	-12.3	-11.8	1.9	1.0	41.6	33.1	39.2	3.4
3000	18.8	-31.1	-12.7	-12.2	1.9	0.9	41.5	32.8	39.2	3.7
3100	18.8	-30.9	-13.3	-12.5	1.9	0.9	41.0	32.7	39.0	3.7
3200	18.7	-30.8	-14.0	-12.8	1.9	0.9	40.9	32.9	38.7	3.8
3300	18.6	-30.6	-14.9	-12.9	1.9	0.9	40.8	32.7	38.6	3.7
3400	18.5	-30.4	-16.0	-12.9	1.9	0.9	40.4	32.2	38.7	4.0
3500	18.4	-30.3	-17.2	-12.6	1.9	0.9	40.2	32.2	38.8	4.3
3600	18.4	-30.1	-18.6	-12.2	1.9	0.9	40.6	32.6	38.8	4.1
3700	18.3	-30.0	-19.8	-11.8	1.9	0.9	41.0	32.8	38.6	3.9
3800	18.2	-29.9	-20.7	-11.4	1.9	0.9	40.6	32.5	38.9	3.9
3900	18.1	-29.8	-20.9	-11.2	1.9	0.9	39.5	32.0	39.0	3.7
4000	18.0	-29.6	-20.2	-11.0	1.9	0.8	39.3	32.0	39.3	3.7
4200	17.8	-29.6	-17.7	-10.5	1.9	0.8	41.3	32.8	39.2	3.6
4400	17.5	-29.4	-15.6	-10.4	1.9	0.8	39.0	31.8	39.3	3.7
4600	17.3	-29.3	-14.1	-10.6	1.9	0.9	39.9	32.5	39.4	3.2
4800	17.1	-29.2	-13.1	-10.8	1.9	0.9	39.2	31.9	39.4	3.0
5000	17.0	-29.0	-12.6	-11.6	1.9	0.9	39.5	32.2	39.5	3.0
5200	16.9	-28.9	-12.3	-12.4	1.9	0.9	40.1	32.2	39.3	3.3
5400	16.8	-28.7	-12.5	-13.4	1.9	0.9	39.6	32.1	39.5	2.8
5600	16.8	-28.4	-13.1	-14.5	1.9	0.9	40.5	32.7	39.5	3.0
5800	16.8	-28.3	-14.2	-15.1	1.9	0.9	40.4	32.6	39.3	3.3
6000	16.7	-28.0	-15.9	-15.3	1.9	0.9	40.3	32.9	39.5	3.5
6500	15.8	-28.5	-13.2	-15.1	2.1	0.9	40.6	34.0	39.0	4.9
7000	13.7	-30.2	-7.5	-17.2	2.8	1.1	40.0	35.0	38.4	5.7

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:

Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA, Temperature = +95°C

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		IP-3 Output P_{OUT} = +26 dBm/Tone	1dB Comp. Output	P_{SAT} Output	Noise Figure
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)	(dBm)	(dBm)	(dB)
10	18.1	-60.7	-11.4	-6.1	47.3	0.8	50.4	36.4	39.1	20.9
100	17.9	-54.1	-12.6	-7.1	24.7	0.9	46.1	36.8	39.7	22.7
200	18.1	-49.3	-12.7	-7.9	14.3	0.9	45.6	36.5	39.6	20.6
300	18.8	-44.9	-12.4	-8.4	8.1	0.9	45.5	36.3	39.4	13.7
400	19.4	-41.7	-11.7	-8.8	5.2	0.9	45.3	36.3	39.7	14.8
500	19.4	-39.9	-10.8	-9.3	4.2	1.0	44.9	36.3	39.7	15.8
600	18.8	-38.9	-10.0	-9.8	4.0	1.0	44.3	36.1	39.5	22.1
700	18.0	-38.5	-9.6	-10.0	4.2	1.0	44.5	36.0	39.3	7.2
800	17.2	-38.2	-9.8	-9.9	4.5	1.0	44.5	36.0	39.1	6.9
900	16.7	-37.7	-10.1	-9.6	4.5	1.0	44.5	35.8	39.5	6.9
1000	16.6	-36.8	-10.8	-9.2	4.2	0.9	43.8	35.4	39.8	7.1
1100	16.7	-36.0	-11.7	-8.6	3.8	0.9	43.6	35.1	39.7	7.3
1200	16.9	-35.1	-12.7	-8.2	3.3	0.9	43.4	34.9	39.3	6.0
1300	17.2	-34.1	-13.9	-8.2	2.9	0.9	43.4	34.8	39.1	5.3
1400	17.4	-33.4	-15.0	-7.6	2.6	0.8	41.4	34.8	39.2	4.7
1500	17.5	-32.7	-15.8	-7.2	2.4	0.8	41.3	34.5	39.4	4.0
1600	17.5	-32.2	-16.3	-7.3	2.2	0.8	42.5	34.2	39.2	3.7
1700	17.4	-31.7	-16.3	-7.5	2.2	0.8	40.7	34.2	39.1	3.4
1800	17.4	-31.4	-15.8	-7.5	2.1	0.8	41.1	34.3	39.2	3.1
1900	17.3	-31.0	-15.1	-7.5	2.0	0.8	41.2	34.3	39.2	3.0
2000	17.2	-30.7	-14.3	-7.6	1.9	0.8	41.2	34.1	39.1	2.9
2100	17.1	-30.5	-13.6	-7.9	1.9	0.9	40.7	33.9	39.1	2.9
2200	17.0	-30.1	-13.1	-8.3	1.9	0.9	41.4	34.0	39.1	3.1
2300	16.9	-29.9	-12.6	-8.8	1.9	0.9	41.7	34.0	39.0	3.2
2400	16.8	-29.7	-12.3	-9.1	1.9	0.9	42.4	34.1	39.0	3.4
2500	16.7	-29.4	-12.1	-9.6	1.9	0.9	42.2	33.9	38.9	3.4
2600	16.6	-29.2	-12.0	-10.2	1.9	0.9	42.1	33.7	38.7	3.8
2700	16.5	-29.0	-12.1	-10.8	1.9	0.9	41.9	33.8	38.5	4.1
2800	16.4	-28.8	-12.3	-11.5	1.9	0.9	41.8	33.7	38.5	4.3
2900	16.3	-28.6	-12.6	-12.0	1.9	0.9	41.8	33.4	38.4	4.6
3000	16.2	-28.3	-13.1	-12.3	1.9	0.9	41.5	33.1	38.3	4.9
3100	16.2	-28.2	-13.7	-12.3	1.9	0.9	40.5	33.0	37.9	4.9
3200	16.1	-28.0	-14.5	-12.2	1.9	0.9	41.0	33.1	37.6	4.9
3300	16.0	-27.8	-15.6	-12.0	1.9	0.9	40.9	32.9	38.0	5.0
3400	15.9	-27.6	-16.9	-11.7	1.9	0.9	40.5	32.5	38.1	5.2
3500	15.8	-27.5	-18.6	-11.2	1.9	0.9	40.4	32.5	38.1	5.5
3600	15.8	-27.3	-20.4	-10.6	1.9	0.8	40.9	32.9	38.1	5.3
3700	15.7	-27.1	-22.1	-10.1	1.8	0.8	41.2	33.1	38.1	5.1
3800	15.6	-27.0	-22.7	-9.8	1.8	0.8	41.0	32.7	38.1	5.1
3900	15.5	-26.9	-22.0	-9.6	1.8	0.8	40.0	32.3	38.2	4.8
4000	15.5	-26.7	-20.3	-9.4	1.8	0.8	39.7	32.4	38.3	4.9
4200	15.3	-26.6	-17.0	-9.1	1.8	0.8	41.5	32.9	38.3	4.8
4400	15.1	-26.4	-14.7	-9.2	1.7	0.8	39.4	32.0	38.4	4.7
4600	15.0	-26.2	-13.3	-9.6	1.7	0.8	40.5	32.8	38.4	4.2
4800	14.9	-25.9	-12.5	-10.1	1.7	0.8	39.9	32.3	38.5	4.0
5000	14.8	-25.7	-12.1	-11.1	1.7	0.9	40.5	32.7	38.6	4.1
5200	14.7	-25.5	-12.1	-12.2	1.7	0.9	40.9	32.8	38.2	4.3
5400	14.6	-25.2	-12.4	-13.3	1.7	0.9	40.6	32.8	38.7	4.0
5600	14.6	-25.0	-13.1	-14.1	1.7	0.9	41.1	33.3	38.7	4.4
5800	14.5	-24.8	-14.0	-14.0	1.7	0.9	40.9	33.3	38.3	4.8
6000	14.3	-24.7	-14.9	-13.4	1.7	0.9	40.7	33.6	38.5	4.9
6500	13.0	-25.4	-12.2	-13.4	2.0	0.9	39.9	34.4	37.8	6.5
7000	10.7	-27.2	-7.9	-14.3	2.8	1.1	38.9	34.9	36.8	7.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in mA.

TEST CONDITIONS: V_{DD} = +28 V, V_G = -1.6 V, I_G = 0.01 mA

FREQ	I_{DD} at P_{IN} = +10 dBm Temperature = +25°C	I_{DD} at P_{IN} = +10 dBm Temperature = -55°C	I_{DD} at P_{IN} = +10 dBm Temperature = +95°C	I_{DD} at P_{IN} = +15 dBm Temperature = +25°C	I_{DD} at P_{IN} = +15 dBm Temperature = -55°C	I_{DD} at P_{IN} = +15 dBm Temperature = +95°C	I_{DD} at P_{IN} = +18 dBm Temperature = +25°C	I_{DD} at P_{IN} = +18 dBm Temperature = -55°C	I_{DD} at P_{IN} = +18 dBm Temperature = +95°C
(MHz)		+10			+15			+18	
10	359.6	334.4	368.4	341.0	326.0	351.2	356.5	358.7	353.2
100	355.9	339.1	371.0	334.3	320.4	351.3	345.4	349.0	348.4
500	355.1	331.9	364.9	349.0	343.5	352.0	378.8	386.0	371.5
1000	368.5	348.4	375.7	357.4	349.1	364.1	381.3	384.5	374.1
2000	372.0	353.0	377.6	377.7	377.7	376.5	424.3	442.4	406.6
3000	379.0	362.6	382.6	390.2	386.6	386.8	431.0	444.0	414.8
4000	375.5	366.3	385.2	391.6	399.6	389.1	440.6	464.9	419.6
5000	380.1	364.8	383.8	385.4	390.4	382.4	430.9	452.3	409.8
6000	373.2	353.5	380.1	362.7	357.3	368.8	387.9	402.6	377.6
7000	376.2	356.5	382.0	360.1	340.4	369.1	364.0	355.7	368.0

FREQ	I_{DD} at P_{IN} = +20 dBm Temperature = +25°C	I_{DD} at P_{IN} = +20 dBm Temperature = -55°C	I_{DD} at P_{IN} = +20 dBm Temperature = +95°C	I_{DD} at P_{IN} = +22 dBm Temperature = +25°C	I_{DD} at P_{IN} = +22 dBm Temperature = -55°C	I_{DD} at P_{IN} = +22 dBm Temperature = +95°C	I_{DD} at P_{IN} = +24 dBm Temperature = +25°C	I_{DD} at P_{IN} = +24 dBm Temperature = -55°C	I_{DD} at P_{IN} = +24 dBm Temperature = +95°C
(MHz)		+20			+22			+24	
10	382.1	390.4	373.0	413.8	423.1	400.4	440.9	451.3	427.4
100	371.6	381.6	364.6	406.5	420.9	395.5	440.9	460.4	430.1
500	413.8	429.1	397.9	456.2	473.1	437.0	492.1	506.0	471.0
1000	415.9	431.2	399.0	465.7	489.8	441.3	527.9	553.2	496.3
2000	476.0	503.2	449.0	539.0	574.5	503.7	608.5	635.6	570.3
3000	477.1	500.7	454.5	537.0	567.9	505.4	606.7	642.0	567.6
4000	492.0	523.1	458.8	554.0	594.2	511.8	629.3	674.2	577.9
5000	478.2	507.8	447.9	538.8	575.9	501.0	611.5	654.0	564.6
6000	425.2	449.9	403.4	475.9	506.7	442.4	536.2	575.7	496.2
7000	379.3	383.0	377.7	410.2	424.1	398.4	452.3	477.6	431.0

FREQ	I_{DD} at P_{IN} = +26 dBm Temperature = +25°C	I_{DD} at P_{IN} = +26 dBm Temperature = -55°C	I_{DD} at P_{IN} = +26 dBm Temperature = +95°C	I_{DD} at P_{IN} = +28 dBm Temperature = +25°C	I_{DD} at P_{IN} = +28 dBm Temperature = -55°C	I_{DD} at P_{IN} = +28 dBm Temperature = +95°C	I_{DD} at P_{IN} = +30 dBm Temperature = +25°C	I_{DD} at P_{IN} = +30 dBm Temperature = -55°C	I_{DD} at P_{IN} = +30 dBm Temperature = +95°C
(MHz)		+26			+28			+30	
10	457.6	467.1	442.9	459.8	470.2	445.6	454.6	464.3	440.2
100	469.8	490.7	458.4	484.9	505.3	474.0	484.5	502.8	474.8
500	518.4	531.7	497.9	526.7	531.2	506.5	527.3	528.8	509.5
1000	591.2	608.2	556.7	641.0	649.6	609.5	663.2	658.2	640.7
2000	660.6	673.7	631.2	685.6	687.8	665.3	701.8	694.8	682.8
3000	673.6	693.1	636.5	700.3	702.0	676.4	711.1	701.5	690.7
4000	703.4	755.7	651.0	768.6	811.9	720.6	787.5	820.6	775.8
5000	690.1	733.7	635.4	756.4	793.9	701.5	807.2	822.5	754.0
6000	604.6	643.9	556.8	668.2	703.2	616.2	723.7	747.3	673.1
7000	503.8	538.4	471.2	559.3	595.7	515.9	610.9	636.7	561.8

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in mA.

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V

FREQ	I_G at P_{IN} = +10 dBm Temperature = +25°C	I_G at P_{IN} = +10 dBm Temperature = -55°C	I_G at P_{IN} = +10 dBm Temperature = +95°C	I_G at P_{IN} = +15 dBm Temperature = +25°C	I_G at P_{IN} = +15 dBm Temperature = -55°C	I_G at P_{IN} = +15 dBm Temperature = +95°C	I_G at P_{IN} = +18 dBm Temperature = +25°C	I_G at P_{IN} = +18 dBm Temperature = -55°C	I_G at P_{IN} = +18 dBm Temperature = +95°C
(MHz)		+10			+15			+18	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FREQ	I_G at P_{IN} = +20 dBm Temperature = +25°C	I_G at P_{IN} = +20 dBm Temperature = -55°C	I_G at P_{IN} = +20 dBm Temperature = +95°C	I_G at P_{IN} = +22 dBm Temperature = +25°C	I_G at P_{IN} = +22 dBm Temperature = -55°C	I_G at P_{IN} = +22 dBm Temperature = +95°C	I_G at P_{IN} = +24 dBm Temperature = +25°C	I_G at P_{IN} = +24 dBm Temperature = -55°C	I_G at P_{IN} = +24 dBm Temperature = +95°C
(MHz)		+20			+22			+24	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FREQ	I_G at P_{IN} = +26 dBm Temperature = +25°C	I_G at P_{IN} = +26 dBm Temperature = -55°C	I_G at P_{IN} = +26 dBm Temperature = +95°C	I_G at P_{IN} = +28 dBm Temperature = +25°C	I_G at P_{IN} = +28 dBm Temperature = -55°C	I_G at P_{IN} = +28 dBm Temperature = +95°C	I_G at P_{IN} = +30 dBm Temperature = +25°C	I_G at P_{IN} = +30 dBm Temperature = -55°C	I_G at P_{IN} = +30 dBm Temperature = +95°C
(MHz)		+26			+28			+30	
10	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	-0.2	-0.6
100	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.1	-0.4
500	-0.2	-0.1	-0.1	-4.3	-4.6	-4.0	-10.7	-11.2	-10.1
1000	0.0	0.0	0.0	-0.3	-0.9	0.0	-3.8	-5.8	-2.3
2000	-0.2	-1.1	0.0	-4.8	-7.3	-3.0	-12.1	-15.3	-9.4
3000	-0.1	-1.1	0.0	-5.2	-8.0	-2.9	-12.8	-16.1	-9.7
4000	0.0	0.0	0.0	0.0	-1.1	0.0	-3.6	-7.8	-1.3
5000	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-1.5	0.0
6000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.7	0.0
7000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	0.0

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBm.

Tone Spacing = 1 MHz

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA

FREQ	Output-IP3 at P_{OUT} = +18 dBm/tone Temperature = +25°C	Output-IP3 at P_{OUT} = +18 dBm/tone Temperature = -55°C	Output-IP3 at P_{OUT} = +18 dBm/tone Temperature = +95°C	Output-IP3 at P_{OUT} = +20 dBm/tone Temperature = +25°C	Output-IP3 at P_{OUT} = +20 dBm/tone Temperature = -55°C	Output-IP3 at P_{OUT} = +20 dBm/tone Temperature = +95°C	Output-IP3 at P_{OUT} = +22 dBm/tone Temperature = +25°C	Output-IP3 at P_{OUT} = +22 dBm/tone Temperature = -55°C	Output-IP3 at P_{OUT} = +22 dBm/tone Temperature = +95°C	Output-IP3 at P_{OUT} = +24 dBm/tone Temperature = +25°C	Output-IP3 at P_{OUT} = +24 dBm/tone Temperature = -55°C	Output-IP3 at P_{OUT} = +24 dBm/tone Temperature = +95°C
(MHz)	+18			+20			+22			+24		
10	43.0	44.2	43.1	48.7	50.0	41.4	48.6	49.4	47.3	47.7	51.8	48.8
100	46.3	48.8	35.2	47.1	46.9	46.4	47.6	47.5	46.5	47.3	47.1	46.5
200	46.4	47.7	35.0	46.8	47.5	46.7	46.6	47.4	46.4	46.6	46.7	46.0
300	46.6	47.5	34.9	46.2	47.3	46.0	46.7	47.1	46.2	46.4	46.6	45.9
400	46.4	48.1	34.6	46.5	47.3	46.4	46.5	46.8	45.9	46.1	46.3	45.8
500	46.4	47.2	34.4	46.5	46.5	46.3	46.0	46.4	46.2	45.9	45.8	45.7
600	45.5	46.2	34.3	45.7	46.3	46.0	45.6	46.0	45.8	45.3	45.3	45.2
700	45.8	46.9	34.8	46.0	46.8	46.0	45.7	46.1	46.0	45.5	45.6	45.3
800	45.9	46.8	35.2	45.8	46.4	45.8	45.8	46.2	45.7	45.4	45.5	45.3
900	46.1	46.7	34.7	45.9	46.7	46.0	45.8	46.2	45.8	45.4	45.3	45.2
1000	45.3	46.0	33.9	45.4	45.6	46.0	45.3	45.5	45.4	44.8	44.6	44.8
1100	45.1	46.1	33.4	45.3	46.0	45.6	45.1	45.4	45.3	44.6	44.4	44.6
1200	45.9	45.6	33.3	45.5	45.7	45.7	45.1	45.2	45.1	44.5	44.3	44.4
1300	45.2	46.4	33.4	45.3	45.8	45.7	45.0	45.4	45.1	44.5	44.4	44.5
1400	45.9	46.2	33.9	45.4	46.1	46.1	45.5	45.8	45.4	44.9	44.8	44.8
1500	45.3	46.1	33.3	45.2	45.5	45.5	45.0	45.1	45.1	44.4	44.2	44.4
1600	44.9	45.3	32.6	44.9	45.2	44.7	44.5	44.6	44.6	43.7	43.4	43.7
1700	45.2	45.2	32.6	44.7	44.8	44.8	44.4	44.4	44.3	43.6	43.2	43.5
1800	45.1	45.3	32.8	44.9	45.2	45.0	44.6	44.5	44.5	43.7	43.4	43.6
1900	45.2	45.4	33.5	45.2	45.5	45.5	44.7	44.8	44.7	44.0	43.8	43.9
2000	45.2	45.7	33.4	45.1	45.3	45.3	44.8	44.8	44.7	44.0	43.6	43.8
2100	45.0	44.8	32.8	44.7	44.8	44.6	44.2	44.3	44.1	43.3	42.9	43.1
2200	44.3	45.4	32.9	44.8	44.9	44.8	44.0	43.9	44.0	43.2	42.7	43.0
2300	44.9	45.4	33.2	44.7	45.0	44.9	44.2	44.2	44.2	43.3	42.9	43.2
2400	44.9	45.3	33.5	44.7	45.2	44.7	44.3	44.4	44.2	43.5	43.1	43.3
2500	45.0	45.4	33.3	44.7	44.9	44.9	44.4	44.1	44.1	43.3	42.9	43.1
2600	45.3	45.5	33.1	44.7	44.8	44.5	44.2	44.1	44.0	41.1	42.8	41.9
2700	44.6	45.2	32.9	44.5	44.6	44.2	44.1	44.0	43.8	41.8	41.5	42.9
2800	44.5	45.1	33.0	44.5	44.7	44.4	44.0	43.9	43.7	42.7	41.9	42.9
2900	44.6	44.8	32.7	44.7	44.9	43.8	44.0	43.9	43.5	42.5	41.7	42.7
3000	44.6	45.3	32.4	44.4	44.7	44.0	44.1	43.9	43.6	42.6	40.8	42.8
3100	44.5	45.2	31.7	44.6	44.9	44.0	43.8	43.8	41.3	42.8	41.8	42.5
3200	44.4	45.1	31.6	44.2	44.6	43.5	43.7	43.7	43.1	42.5	42.2	42.2
3300	44.8	44.9	31.4	44.2	44.4	43.2	43.6	43.5	42.9	42.5	42.1	42.1
3400	44.4	45.0	30.7	44.1	44.2	42.9	43.5	43.4	42.6	42.3	41.9	41.8
3500	44.3	44.7	30.4	44.1	44.3	43.2	43.3	43.5	42.8	42.2	41.8	41.8
3600	44.2	45.3	30.7	44.4	44.7	43.7	43.9	44.0	43.2	42.7	42.4	42.2
3700	44.5	45.3	31.3	44.5	44.9	43.3	43.9	44.2	43.3	43.0	42.6	42.4
3800	44.6	45.2	30.8	44.2	44.8	43.0	43.8	43.9	42.9	42.8	42.4	42.2
3900	43.8	44.2	30.2	43.7	43.9	42.7	43.1	43.1	42.3	41.8	41.4	41.4
4000	43.4	44.1	30.4	43.7	43.6	42.7	42.9	42.9	42.3	41.5	41.2	41.2
4200	44.8	45.4	31.5	45.1	45.3	43.4	44.3	44.6	43.4	43.4	43.2	42.8
4400	43.7	43.9	30.5	43.5	44.0	42.4	42.8	43.0	42.1	41.5	41.1	41.1
4600	44.3	44.8	31.0	44.0	44.4	43.1	43.5	43.7	42.9	42.5	42.2	42.1
4800	43.8	44.3	30.9	43.5	43.7	42.5	43.0	43.1	42.3	41.8	41.2	41.5
5000	43.8	44.8	31.2	44.0	44.1	42.6	43.4	43.3	42.7	42.1	41.4	42.0
5200	44.4	45.8	31.5	44.2	44.4	42.6	43.8	43.7	42.7	42.7	42.2	42.2
5400	44.1	44.5	31.5	43.7	44.4	42.4	43.3	43.2	42.3	42.1	41.3	41.8
5600	44.2	45.1	32.1	43.9	44.7	42.3	43.8	44.0	42.5	42.8	42.3	42.2
5800	44.1	45.3	32.1	44.1	44.7	41.8	43.7	43.8	41.9	42.7	42.2	41.8
6000	43.9	44.9	32.0	44.0	44.5	41.2	43.6	43.6	41.5	42.5	41.9	41.4
6500	42.7	43.9	32.3	42.8	43.8	40.1	42.4	43.1	40.4	41.5	41.7	40.3
7000	41.0	42.6	33.2	41.0	41.9	39.0	40.5	41.0	38.9	39.8	40.2	38.9

Note: Units are in dBm.
Tone Spacing = 1 MHz
TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -2 V, I_G = 0.01 mA

FREQ	Output-IP3 at P_{OUT} = +26 dBm/tone Temperature = +25°C	Output-IP3 at P_{OUT} = +26 dBm/tone Temperature = -55°C	Output-IP3 at P_{OUT} = +26 dBm/tone Temperature = +95°C	Output-IP3 at P_{OUT} = +28 dBm/tone Temperature = +25°C	Output-IP3 at P_{OUT} = +28 dBm/tone Temperature = -55°C	Output-IP3 at P_{OUT} = +28 dBm/tone Temperature = +95°C	Output-IP3 at P_{OUT} = +30 dBm/tone Temperature = +25°C	Output-IP3 at P_{OUT} = +30 dBm/tone Temperature = -55°C	Output-IP3 at P_{OUT} = +30 dBm/tone Temperature = +95°C
(MHz)	+26			+28			+30		
10	48.1	46.8	50.4	46.8	46.2	47.2	41.6	41.7	45.5
100	46.7	46.5	46.1	45.8	45.1	45.6	44.1	43.3	44.3
200	46.1	45.8	45.6	45.0	44.4	44.9	43.4	42.2	41.4
300	46.0	45.7	45.5	44.8	44.1	44.7	40.8	40.9	42.5
400	45.5	45.2	45.3	44.2	43.6	44.3	41.2	41.3	43.2
500	45.1	44.7	44.9	43.7	43.1	43.8	40.9	41.0	42.8
600	44.4	44.0	44.3	42.9	42.4	40.1	40.4	40.5	42.1
700	44.7	44.4	44.5	40.7	40.7	40.6	40.7	40.8	42.4
800	44.7	44.4	44.5	41.0	40.9	41.0	41.0	41.0	42.6
900	44.6	44.1	44.5	43.3	42.4	41.8	41.7	41.8	42.6
1000	43.8	43.2	43.8	42.5	41.6	42.6	41.7	41.8	41.9
1100	43.6	43.0	43.6	42.2	41.7	41.0	41.1	41.2	41.4
1200	43.4	42.8	43.4	40.8	40.9	40.6	40.6	40.7	41.2
1300	43.4	42.9	43.4	40.8	40.9	40.7	40.7	40.7	41.1
1400	43.8	43.4	41.4	41.4	41.5	41.2	41.3	41.4	41.6
1500	41.1	42.8	41.3	41.2	41.4	41.1	41.3	41.4	41.2
1600	42.5	42.1	42.5	41.0	41.2	40.8	41.0	41.1	40.8
1700	42.3	41.9	40.7	40.9	41.0	40.7	40.9	41.0	40.8
1800	41.1	40.8	41.1	41.1	41.2	40.9	41.2	41.3	40.9
1900	41.4	41.2	41.2	41.3	41.5	41.2	41.5	41.5	41.2
2000	42.8	42.4	41.2	41.4	41.5	41.3	41.6	41.6	41.3
2100	40.9	41.7	40.7	41.1	41.1	40.9	41.3	41.3	41.0
2200	40.9	40.7	41.4	41.1	41.2	40.8	41.3	41.4	40.9
2300	41.1	41.0	41.7	41.3	41.3	41.1	41.4	41.5	41.2
2400	42.3	41.8	42.4	41.5	41.4	41.3	41.6	41.6	41.4
2500	42.3	41.7	42.2	41.4	41.3	41.2	41.5	41.5	41.2
2600	42.2	41.8	42.1	41.2	41.0	41.1	41.2	41.2	41.0
2700	42.1	41.7	41.9	41.0	40.9	41.1	41.1	41.0	40.8
2800	42.0	41.6	41.8	41.1	40.8	41.1	41.0	40.9	40.8
2900	42.0	41.6	41.8	40.8	40.7	40.7	40.8	40.8	40.5
3000	41.8	41.5	41.5	40.5	40.4	40.5	40.5	40.5	40.2
3100	41.4	41.0	40.5	40.1	39.9	40.1	39.9	40.0	39.6
3200	41.2	40.9	41.0	40.2	40.0	39.9	40.1	40.3	39.6
3300	41.1	40.8	40.9	40.1	39.9	40.0	39.9	40.1	39.6
3400	40.7	40.4	40.5	39.6	39.3	39.5	40.0	40.2	39.7
3500	40.5	40.2	40.4	39.3	39.0	39.3	39.7	40.0	39.5
3600	41.0	40.6	40.9	39.7	39.4	39.6	39.7	39.9	39.4
3700	41.4	41.0	41.2	40.2	39.9	40.1	39.8	39.8	39.7
3800	41.1	40.6	41.0	39.9	39.6	40.0	40.3	40.3	39.9
3900	40.0	39.5	40.0	39.1	38.8	39.2	39.9	40.1	39.6
4000	39.7	39.3	39.7	38.9	38.7	39.1	39.6	39.8	39.3
4200	41.7	41.3	41.5	40.2	39.9	40.1	40.1	40.3	40.0
4400	39.4	39.0	39.4	38.9	38.8	39.1	39.7	40.0	39.3
4600	40.5	39.9	40.5	39.5	39.2	39.4	39.7	39.8	39.4
4800	39.7	39.2	39.9	39.3	39.1	39.6	40.0	40.3	39.7
5000	40.2	39.5	40.5	39.6	39.3	39.8	40.1	40.3	39.9
5200	40.8	40.1	40.9	40.3	39.8	40.2	40.5	40.7	40.2
5400	40.4	39.6	40.6	40.0	39.7	40.1	40.7	40.9	40.2
5600	41.2	40.5	41.1	40.4	40.2	40.3	40.6	40.9	40.2
5800	41.1	40.4	40.9	40.4	40.2	40.3	40.6	40.9	40.1
6000	40.9	40.3	40.7	40.3	40.1	40.1	40.5	40.8	40.0
6500	40.6	40.6	39.9	40.2	40.4	39.9	40.2	40.5	39.9
7000	39.6	40.0	38.9	39.6	40.1	39.0	39.5	40.1	38.6

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBc.

Tone Spacing = 1 MHz

TEST CONDITIONS: V_{DD} = +28 V, Temperature = +25°C

FREQ	Output-IM3 at P_{OUT} = +18 dBm/tone I_{DD} = 400 mA	Output-IM3 at P_{OUT} = +18 dBm/tone I_{DD} = 300 mA	Output-IM3 at P_{OUT} = +18 dBm/tone I_{DD} = 200 mA	Output-IM3 at P_{OUT} = +18 dBm/tone I_{DD} = 100 mA	Output-IM3 at P_{OUT} = +20 dBm/tone I_{DD} = 400 mA	Output-IM3 at P_{OUT} = +20 dBm/tone I_{DD} = 300 mA	Output-IM3 at P_{OUT} = +20 dBm/tone I_{DD} = 200 mA	Output-IM3 at P_{OUT} = +20 dBm/tone I_{DD} = 100 mA	Output-IM3 at P_{OUT} = +22 dBm/tone I_{DD} = 400 mA	Output-IM3 at P_{OUT} = +22 dBm/tone I_{DD} = 300 mA	Output-IM3 at P_{OUT} = +22 dBm/tone I_{DD} = 200 mA	Output-IM3 at P_{OUT} = +22 dBm/tone I_{DD} = 100 mA	Output-IM3 at P_{OUT} = +24 dBm/tone I_{DD} = 400 mA	Output-IM3 at P_{OUT} = +24 dBm/tone I_{DD} = 300 mA	Output-IM3 at P_{OUT} = +24 dBm/tone I_{DD} = 200 mA	Output-IM3 at P_{OUT} = +24 dBm/tone I_{DD} = 100 mA
(MHz)	+18				+20				+22				+24			
10	-50.1	-55.2	-53.5	-35.2	-57.3	-46.7	-48.0	-31.7	-53.2	-66.3	-41.3	-29.1	-47.4	-44.8	-35.4	-27.4
100	-56.7	-56.1	-47.3	-35.4	-54.1	-50.9	-43.7	-31.1	-51.2	-46.1	-38.0	-27.6	-46.6	-41.0	-32.2	-26.1
500	-56.8	-53.0	-46.4	-34.2	-52.9	-48.2	-41.2	-30.3	-48.1	-43.7	-35.4	-27.9	-43.7	-38.1	-30.1	-26.7
600	-55.1	-52.1	-45.5	-33.8	-51.4	-48.0	-40.3	-30.1	-47.2	-42.8	-34.5	-27.9	-42.5	-36.9	-29.3	-26.8
800	-55.8	-53.8	-46.8	-35.8	-51.7	-48.3	-41.5	-32.1	-47.6	-43.5	-36.0	-29.7	-42.8	-37.9	-30.9	-28.2
1000	-54.7	-51.6	-43.7	-32.4	-50.8	-46.6	-38.5	-29.1	-46.5	-41.4	-33.0	-27.4	-41.5	-35.4	-28.3	-26.7
1200	-55.9	-50.4	-43.1	-31.3	-50.9	-46.0	-37.8	-28.2	-46.3	-40.6	-32.0	-27.1	-41.0	-34.5	-27.1	-26.8
1400	-54.5	-50.5	-43.3	-31.3	-50.5	-46.0	-37.7	-28.3	-46.1	-40.7	-32.1	-27.1	-40.9	-34.6	-27.3	-26.8
1600	-54.5	-49.9	-42.1	-30.4	-49.9	-45.1	-36.5	-27.8	-45.4	-39.5	-31.1	-26.7	-40.0	-33.5	-26.6	-26.6
1800	-54.4	-49.4	-41.8	-30.5	-49.9	-44.7	-36.2	-28.0	-45.1	-39.1	-31.0	-26.9	-39.6	-33.1	-26.7	-26.7
2000	-54.2	-49.2	-41.5	-30.6	-49.9	-44.6	-36.0	-28.2	-44.9	-38.9	-31.0	-27.2	-39.4	-33.0	-26.9	-27.0
2200	-52.7	-48.9	-40.5	-30.1	-49.6	-43.8	-34.9	-27.9	-44.0	-37.8	-30.2	-27.0	-38.3	-31.9	-26.4	-26.9
2400	-53.7	-49.3	-41.3	-31.2	-49.4	-44.2	-35.7	-28.9	-44.7	-38.4	-31.2	-27.9	-39.0	-32.9	-27.4	-27.6
2600	-54.6	-48.7	-40.4	-30.4	-49.5	-43.8	-35.1	-28.3	-44.5	-37.9	-30.4	-27.5	-34.1	-31.4	-30.1	-31.8
2800	-53.0	-48.5	-39.7	-29.8	-49.1	-43.1	-34.6	-27.7	-44.0	-37.4	-30.0	-26.7	-37.5	-31.5	-26.7	-26.7
3000	-53.2	-48.2	-39.6	-28.6	-48.7	-43.3	-34.0	-26.7	-44.3	-37.3	-29.0	-26.1	-37.2	-30.7	-25.7	-26.4
3200	-52.8	-47.9	-38.8	-27.0	-48.5	-42.6	-32.9	-24.9	-43.3	-36.2	-27.7	-24.4	-37.0	-30.1	-23.8	-24.5
3400	-52.8	-47.0	-37.7	-25.3	-48.2	-41.7	-31.7	-23.7	-43.1	-35.5	-26.2	-23.5	-36.5	-28.9	-22.6	-23.8
3600	-52.4	-47.6	-38.8	-25.5	-48.7	-42.7	-32.5	-23.6	-43.8	-36.4	-26.7	-23.2	-37.3	-29.6	-22.7	-23.3
3800	-53.2	-48.2	-38.8	-25.8	-48.5	-42.9	-32.7	-23.9	-43.6	-36.5	-27.0	-23.5	-37.6	-29.7	-23.1	-23.8
4000	-50.8	-46.1	-36.6	-25.0	-47.3	-40.7	-30.4	-23.9	-41.8	-34.1	-25.1	-23.8	-35.1	-27.1	-22.4	-24.0
4200	-51.1	-46.0	-36.4	-25.0	-47.1	-40.7	-30.0	-24.1	-41.7	-33.9	-24.9	-24.1	-35.0	-26.8	-22.5	-24.4
4400	-51.4	-45.9	-36.3	-25.1	-46.9	-40.6	-29.7	-24.2	-41.6	-33.7	-24.7	-24.4	-34.9	-26.5	-22.6	-24.8
4600	-51.5	-46.3	-36.7	-25.5	-47.0	-40.9	-30.1	-24.7	-41.8	-34.1	-25.2	-24.8	-35.2	-26.9	-23.1	-25.2
4800	-51.5	-46.6	-37.2	-25.9	-47.0	-41.1	-30.6	-25.2	-42.0	-34.5	-25.7	-25.2	-35.5	-27.3	-23.5	-25.6
5000	-51.6	-47.3	-38.1	-26.7	-48.0	-42.0	-31.6	-25.6	-42.8	-35.3	-26.6	-25.6	-36.2	-28.3	-24.2	-25.9
5200	-52.7	-48.0	-39.1	-27.4	-48.3	-42.7	-32.8	-26.1	-43.5	-36.5	-27.3	-26.1	-37.3	-29.2	-24.7	-26.4
5400	-52.1	-47.1	-38.2	-27.4	-47.5	-41.7	-31.8	-26.4	-42.6	-35.3	-27.0	-26.5	-36.3	-28.5	-24.8	-26.9
5600	-52.5	-48.3	-39.9	-28.5	-47.8	-43.3	-33.7	-27.0	-43.7	-37.1	-28.4	-26.7	-37.6	-30.3	-25.6	-27.0
5800	-52.3	-48.8	-39.8	-28.6	-48.1	-43.1	-33.5	-27.2	-43.4	-36.9	-28.4	-27.0	-37.5	-30.1	-25.6	-27.3
6000	-51.7	-47.6	-39.5	-28.4	-47.9	-42.7	-33.3	-26.9	-43.1	-36.4	-28.2	-26.7	-36.9	-29.8	-25.4	-26.8
6500	-49.5	-46.9	-39.2	-29.2	-45.5	-42.2	-33.4	-27.4	-40.8	-35.7	-28.9	-26.7	-35.1	-30.0	-26.1	-26.6
7000	-45.9	-43.6	-36.4	-30.7	-42.0	-38.2	-32.1	-29.7	-37.0	-32.8	-29.3	-29.0	-31.6	-29.0	-27.4	-28.0

Note: Units are in dBc.

Tone Spacing = 1 MHz

TEST CONDITIONS: V_{DD} = +28 V, Temperature = +25°C

FREQ	Output-IM3 at P_{OUT} = +26 dBm/tone I_{DD} = 400 mA	Output-IM3 at P_{OUT} = +26 dBm/tone I_{DD} = 300 mA	Output-IM3 at P_{OUT} = +26 dBm/tone I_{DD} = 200 mA	Output-IM3 at P_{OUT} = +26 dBm/tone I_{DD} = 100 mA	Output-IM3 at P_{OUT} = +28 dBm/tone I_{DD} = 400 mA	Output-IM3 at P_{OUT} = +28 dBm/tone I_{DD} = 300 mA	Output-IM3 at P_{OUT} = +28 dBm/tone I_{DD} = 200 mA	Output-IM3 at P_{OUT} = +28 dBm/tone I_{DD} = 100 mA	Output-IM3 at P_{OUT} = +30 dBm/tone I_{DD} = 400 mA	Output-IM3 at P_{OUT} = +30 dBm/tone I_{DD} = 300 mA	Output-IM3 at P_{OUT} = +30 dBm/tone I_{DD} = 200 mA	Output-IM3 at P_{OUT} = +30 dBm/tone I_{DD} = 100 mA
(MHz)	+26				+28				+30			
10	-44.2	-37.6	-28.7	-26.7	-37.6	-30.8	-25.0	-26.8	-23.1	-23.0	-23.0	-23.1
100	-41.5	-35.1	-26.7	-25.8	-35.5	-28.3	-23.6	-25.6	-28.1	-23.1	-22.0	-24.4
500	-38.2	-31.7	-26.3	-26.3	-31.4	-26.4	-23.9	-25.7	-21.8	-21.5	-21.2	-20.9
600	-36.8	-30.5	-25.9	-26.1	-29.9	-25.6	-23.4	-25.3	-20.8	-20.5	-20.2	-19.9
800	-37.3	-31.7	-27.4	-27.0	-26.0	-25.9	-26.1	-26.3	-21.9	-21.7	-21.7	-21.9
1000	-35.6	-29.4	-25.2	-26.3	-28.9	-24.9	-23.4	-25.7	-23.3	-23.3	-23.6	-24.0
1200	-34.7	-28.3	-24.4	-26.9	-25.5	-25.6	-26.1	-26.9	-21.3	-21.1	-21.4	-22.2
1400	-32.5	-28.8	-27.0	-29.4	-26.0	-25.8	-26.3	-27.5	-22.0	-21.7	-21.9	-22.9
1600	-31.5	-29.0	-29.7	-32.0	-26.2	-25.8	-26.2	-27.7	-22.2	-21.8	-22.0	-23.1
1800	-31.7	-28.5	-28.2	-30.0	-26.3	-25.7	-26.0	-27.4	-22.4	-21.9	-22.0	-23.1
2000	-30.3	-27.9	-27.0	-28.9	-26.4	-25.6	-25.7	-27.2	-22.7	-22.1	-22.3	-23.6
2200	-29.8	-27.8	-27.0	-28.7	-26.3	-25.2	-25.2	-26.9	-22.5	-21.9	-22.2	-23.5
2400	-32.5	-28.0	-25.1	-27.3	-27.0	-25.5	-25.3	-27.0	-23.2	-22.2	-22.4	-24.0
2600	-32.5	-27.4	-24.7	-27.2	-26.4	-24.5	-24.1	-26.4	-22.5	-21.3	-21.2	-23.0
2800	-32.0	-27.0	-24.7	-27.3	-26.1	-23.7	-23.1	-25.1	-22.0	-20.5	-20.1	-22.0
3000	-31.7	-25.9	-23.7	-26.8	-25.0	-22.8	-22.6	-24.2	-21.0	-19.5	-19.2	-21.3
3200	-30.4	-24.7	-22.0	-24.3	-24.4	-21.0	-20.9	-23.2	-20.2	-19.8	-19.9	-20.7
3400	-29.4	-23.4	-21.2	-23.8	-23.2	-20.3	-20.5	-24.1	-20.0	-19.5	-19.9	-21.2
3600	-30.1	-23.6	-21.0	-23.2	-23.4	-20.2	-20.1	-22.2	-19.4	-18.8	-19.0	-20.0
3800	-30.3	-24.0	-21.5	-23.9	-23.8	-20.8	-20.8	-23.3	-20.5	-20.0	-20.1	-21.1
4000	-27.5	-22.5	-21.4	-24.0	-21.9	-20.2	-20.6	-22.9	-19.2	-18.8	-19.1	-20.1
4200	-27.1	-22.5	-21.7	-24.4	-21.8	-20.4	-21.5	-23.4	-19.3	-18.9	-19.3	-20.3
4400	-26.8	-22.5	-21.9	-24.8	-21.8	-20.6	-22.3	-23.8	-19.3	-19.1	-19.5	-20.5
4600	-27.1	-22.9	-22.3	-25.2	-22.2	-21.7	-22.7	-24.3	-19.7	-19.4	-19.7	-20.8
4800	-27.4	-23.3	-22.8	-25.7	-22.6	-22.9	-23.1	-24.8	-20.1	-19.7	-19.9	-21.1
5000	-28.4	-24.0	-23.2	-25.7	-23.2	-21.8	-23.1	-24.6	-20.3	-19.9	-20.1	-21.2
5200	-29.5	-24.7	-23.8	-26.5	-24.5	-23.6	-23.7	-25.6	-20.9	-20.3	-20.4	-21.8
5400	-28.7	-24.7	-24.0	-26.9	-24.0	-22.7	-23.3	-25.7	-21.3	-21.0	-21.4	-22.4
5600	-30.4	-25.6	-24.3	-26.7	-24.8	-23.0	-23.2	-25.0	-21.3	-20.8	-20.9	-21.8
5800	-30.2	-25.7	-24.5	-26.9	-24.8	-23.2	-23.4	-25.2	-21.2	-20.7	-20.9	-21.6
6000	-29.8	-25.4	-24.2	-26.5	-24.6	-23.0	-23.1	-25.2	-21.0	-20.5	-20.6	-21.5
6500	-29.1	-26.0	-24.3	-26.1	-24.4	-23.2	-22.9	-23.9	-20.4	-19.5	-19.2	-20.3
7000	-27.2	-25.8	-25.3	-26.2	-23.2	-22.6	-22.1	-22.6	-19.0	-18.6	-18.3	-18.6

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBc.

Tone Spacing = 1 MHz

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA

FREQ	Output-IM3 at P_{OUT} = +18 dBm/tone Temperature = +25°C	Output-IM3 at P_{OUT} = +18 dBm/tone Temperature = -55°C	Output-IM3 at P_{OUT} = +18 dBm/tone Temperature = +95°C	Output-IM3 at P_{OUT} = +20 dBm/tone Temperature = +25°C	Output-IM3 at P_{OUT} = +20 dBm/tone Temperature = -55°C	Output-IM3 at P_{OUT} = +20 dBm/tone Temperature = +95°C	Output-IM3 at P_{OUT} = +22 dBm/tone Temperature = +25°C	Output-IM3 at P_{OUT} = +22 dBm/tone Temperature = -55°C	Output-IM3 at P_{OUT} = +22 dBm/tone Temperature = +95°C	Output-IM3 at P_{OUT} = +24 dBm/tone Temperature = +25°C	Output-IM3 at P_{OUT} = +24 dBm/tone Temperature = -55°C	Output-IM3 at P_{OUT} = +24 dBm/tone Temperature = +95°C
(MHz)	+18			+20			+22			+24		
10	-50.1	-52.3	-50.3	-57.3	-60.0	-42.9	-53.2	-54.9	-50.7	-47.4	-55.6	-49.5
100	-56.7	-61.5	-34.4	-54.1	-53.9	-52.7	-51.2	-51.0	-48.9	-46.6	-46.2	-45.1
500	-56.8	-58.3	-32.8	-52.9	-53.1	-52.6	-48.1	-48.8	-48.4	-43.7	-43.7	-43.3
600	-55.1	-56.5	-32.5	-51.4	-52.5	-52.0	-47.2	-48.0	-47.6	-42.5	-42.6	-42.4
800	-55.8	-57.6	-34.5	-51.7	-52.9	-51.7	-47.6	-48.3	-47.4	-42.8	-43.0	-42.5
1000	-54.7	-55.9	-31.7	-50.8	-51.3	-51.9	-46.5	-47.0	-46.8	-41.5	-41.1	-41.5
1200	-55.9	-55.1	-30.7	-50.9	-51.4	-51.3	-46.3	-46.4	-46.1	-41.0	-40.6	-40.9
1400	-54.5	-56.5	-30.7	-50.5	-51.3	-51.2	-46.1	-46.5	-46.3	-40.9	-40.6	-40.9
1600	-54.5	-55.3	-29.9	-49.9	-50.3	-50.3	-45.4	-45.5	-45.5	-40.0	-39.4	-39.9
1800	-54.4	-54.6	-30.1	-49.9	-50.4	-50.3	-45.1	-45.2	-45.0	-39.6	-39.0	-39.4
2000	-54.2	-54.2	-30.2	-49.9	-50.3	-50.1	-44.9	-45.1	-44.8	-39.4	-38.6	-39.1
2200	-52.7	-54.7	-29.7	-49.6	-49.7	-49.6	-44.0	-43.8	-44.1	-38.3	-37.4	-38.1
2400	-53.7	-54.7	-31.0	-49.4	-50.3	-49.4	-44.7	-44.7	-44.3	-39.0	-38.3	-38.6
2600	-54.6	-54.9	-30.2	-49.5	-49.6	-48.9	-44.5	-44.2	-44.1	-34.1	-37.7	-35.7
2800	-53.0	-54.2	-29.9	-49.1	-49.3	-48.7	-44.0	-43.8	-43.4	-37.5	-35.7	-37.8
3000	-53.2	-54.6	-28.7	-48.7	-49.3	-48.1	-44.3	-43.8	-43.2	-37.2	-33.6	-37.5
3200	-52.8	-54.1	-27.2	-48.5	-49.1	-47.1	-43.3	-43.3	-42.1	-37.0	-36.5	-36.4
3400	-52.8	-53.9	-25.4	-48.2	-48.4	-45.9	-43.1	-42.8	-41.3	-36.5	-35.7	-35.7
3600	-52.4	-54.6	-25.3	-48.7	-49.5	-47.4	-43.8	-43.9	-42.4	-37.3	-36.8	-36.5
3800	-52.3	-53.5	-25.5	-48.2	-48.8	-46.0	-43.0	-43.3	-41.6	-36.7	-36.0	-35.8
4000	-50.8	-52.2	-24.7	-47.3	-47.3	-45.3	-41.8	-41.9	-40.6	-35.1	-34.4	-34.5
4200	-51.1	-52.1	-24.8	-47.1	-47.6	-45.0	-41.7	-41.9	-40.4	-35.0	-34.3	-34.3
4400	-51.4	-51.9	-24.9	-46.9	-47.9	-44.7	-41.6	-41.9	-40.3	-34.9	-34.2	-34.2
4600	-52.7	-53.5	-26.1	-47.9	-48.8	-46.2	-42.9	-43.4	-41.7	-37.0	-36.4	-36.2
4800	-51.5	-52.6	-25.8	-47.0	-47.5	-45.1	-42.0	-42.2	-40.6	-35.5	-34.4	-35.0
5000	-51.6	-53.5	-26.3	-48.0	-48.1	-45.3	-42.8	-42.6	-41.4	-36.2	-34.9	-35.9
5200	-52.7	-55.5	-27.0	-48.3	-48.9	-45.1	-43.5	-43.5	-41.4	-37.3	-36.3	-36.4
5400	-52.1	-53.0	-27.0	-47.5	-48.8	-44.7	-42.6	-42.5	-40.7	-36.3	-34.6	-35.5
5600	-52.5	-54.1	-28.2	-47.8	-49.3	-44.7	-43.7	-44.1	-41.0	-37.6	-36.6	-36.3
5800	-52.3	-54.5	-28.2	-48.1	-49.4	-43.6	-43.4	-43.6	-39.8	-37.5	-36.3	-35.5
6000	-51.7	-53.7	-28.0	-47.9	-48.9	-42.4	-43.1	-43.2	-39.1	-36.9	-35.8	-34.8
6500	-49.5	-51.8	-28.7	-45.5	-47.6	-40.2	-40.8	-42.2	-36.9	-35.1	-35.4	-32.6
7000	-45.9	-49.3	-30.3	-42.0	-43.9	-38.0	-37.0	-38.1	-33.9	-31.6	-32.4	-29.7

Note: Units are in dBc.

Tone Spacing = 1 MHz

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA

FREQ	Output-IM3 at P_{OUT} = +26 dBm/tone Temperature = +25°C	Output-IM3 at P_{OUT} = +26 dBm/tone Temperature = -55°C	Output-IM3 at P_{OUT} = +26 dBm/tone Temperature = +95°C	Output-IM3 at P_{OUT} = +28 dBm/tone Temperature = +25°C	Output-IM3 at P_{OUT} = +28 dBm/tone Temperature = -55°C	Output-IM3 at P_{OUT} = +28 dBm/tone Temperature = +95°C	Output-IM3 at P_{OUT} = +30 dBm/tone Temperature = +25°C	Output-IM3 at P_{OUT} = +30 dBm/tone Temperature = -55°C	Output-IM3 at P_{OUT} = +30 dBm/tone Temperature = +95°C
(MHz)		+26			+28			+30	
10	-44.2	-41.6	-48.9	-37.6	-36.4	-38.3	-23.1	-23.4	-31.0
100	-41.5	-41.1	-40.2	-35.5	-34.1	-35.2	-28.1	-26.5	-28.7
500	-38.2	-37.4	-37.8	-31.4	-30.2	-31.7	-21.8	-22.0	-25.5
600	-36.8	-36.0	-36.7	-29.9	-28.8	-24.2	-20.8	-20.9	-24.3
800	-37.3	-36.8	-37.1	-26.0	-25.8	-26.0	-21.9	-21.9	-25.2
1000	-35.6	-34.4	-35.7	-28.9	-27.2	-29.2	-23.3	-23.6	-23.8
1200	-34.7	-33.7	-34.7	-25.5	-25.8	-25.2	-21.3	-21.4	-22.4
1400	-32.5	-33.7	-32.7	-26.0	-26.3	-25.7	-22.0	-22.1	-22.3
1600	-31.5	-32.7	-29.9	-26.2	-26.5	-25.8	-22.2	-22.3	-22.0
1800	-31.7	-31.1	-29.9	-26.3	-26.5	-25.9	-22.4	-22.5	-22.0
2000	-30.3	-30.9	-29.9	-26.4	-26.6	-26.1	-22.7	-22.9	-22.3
2200	-29.8	-29.4	-30.8	-26.3	-26.3	-25.7	-22.5	-22.8	-21.9
2400	-32.5	-31.6	-32.7	-27.0	-26.8	-26.6	-23.2	-23.2	-22.8
2600	-32.5	-31.6	-32.3	-26.4	-26.0	-26.3	-22.5	-22.4	-22.1
2800	-32.0	-31.2	-31.7	-26.1	-25.6	-26.2	-22.0	-21.9	-21.6
3000	-31.7	-31.0	-31.0	-25.0	-24.7	-24.9	-21.0	-21.1	-20.4
3200	-30.4	-29.8	-30.0	-24.4	-24.0	-23.9	-20.2	-20.6	-19.2
3400	-29.4	-28.7	-29.1	-23.2	-22.7	-23.0	-20.0	-20.4	-19.4
3600	-30.1	-29.3	-29.8	-23.4	-22.7	-23.3	-19.4	-19.8	-18.9
3800	-29.4	-28.5	-29.2	-23.3	-22.7	-23.3	-19.7	-19.9	-19.3
4000	-27.5	-26.6	-27.4	-21.9	-21.4	-22.2	-19.2	-19.7	-18.6
4200	-27.1	-26.3	-27.1	-21.8	-21.5	-22.2	-19.3	-19.8	-18.6
4400	-26.8	-26.0	-26.8	-21.8	-21.5	-22.3	-19.3	-19.9	-18.7
4600	-28.9	-27.8	-29.0	-23.0	-22.3	-22.8	-19.3	-19.6	-18.9
4800	-27.4	-26.5	-27.8	-22.6	-22.2	-23.1	-20.1	-20.6	-19.5
5000	-28.4	-27.1	-28.9	-23.2	-22.7	-23.6	-20.3	-20.6	-19.8
5200	-29.5	-28.1	-29.8	-24.5	-23.5	-24.4	-20.9	-21.4	-20.4
5400	-28.7	-27.3	-29.2	-24.0	-23.5	-24.2	-21.3	-21.8	-20.5
5600	-30.4	-29.1	-30.3	-24.8	-24.4	-24.7	-21.3	-21.8	-20.4
5800	-30.2	-28.9	-29.9	-24.8	-24.5	-24.7	-21.2	-21.8	-20.2
6000	-29.8	-28.6	-29.4	-24.6	-24.3	-24.2	-21.0	-21.7	-20.0
6500	-29.1	-29.2	-27.9	-24.4	-24.8	-23.7	-20.4	-21.0	-19.7
7000	-27.2	-28.0	-25.9	-23.2	-24.2	-22.0	-19.0	-20.2	-17.2

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBc.

Tone Spacing = 1 MHz

TEST CONDITIONS: V_{DD} = +28 V, Temperature = +25°C

TEST CONDITIONS: VDD = 28V @ Temperature = +25°C

FREQ	Output-IM5 at P_{OUT} = +18 dBm/tone I_{DD} = 400 mA	Output-IM5 at P_{OUT} = +18 dBm/tone I_{DD} = 300 mA	Output-IM5 at P_{OUT} = +18 dBm/tone I_{DD} = 200 mA	Output-IM5 at P_{OUT} = +18 dBm/tone I_{DD} = 100 mA	Output-IM5 at P_{OUT} = +20 dBm/tone I_{DD} = 400 mA	Output-IM5 at P_{OUT} = +20 dBm/tone I_{DD} = 300 mA	Output-IM5 at P_{OUT} = +20 dBm/tone I_{DD} = 200 mA	Output-IM5 at P_{OUT} = +20 dBm/tone I_{DD} = 100 mA	Output-IM5 at P_{OUT} = +22 dBm/tone I_{DD} = 400 mA	Output-IM5 at P_{OUT} = +22 dBm/tone I_{DD} = 300 mA	Output-IM5 at P_{OUT} = +22 dBm/tone I_{DD} = 200 mA	Output-IM5 at P_{OUT} = +22 dBm/tone I_{DD} = 100 mA
(MHz)	+18				+20				+22			
10	-50.4	-50.0	-42.6	-58.0	-47.5	-55.1	-49.2	-48.3	-61.2	-53.3	-51.8	-48.6
100	-65.3	-69.7	-66.5	-68.4	-66.2	-63.2	-63.8	-58.6	-64.0	-70.0	-63.6	-46.6
500	-77.4	-74.9	-73.8	-64.7	-80.3	-74.6	-74.2	-52.4	-76.5	-71.3	-63.4	-43.1
600	-75.3	-68.3	-76.8	-66.2	-73.6	-77.3	-72.3	-50.3	-75.4	-73.3	-62.7	-42.5
800	-68.6	-76.2	-73.0	-67.9	-73.5	-75.7	-71.0	-53.4	-75.2	-72.5	-65.2	-45.1
1000	-70.4	-73.4	-70.4	-58.9	-77.4	-76.2	-66.2	-48.4	-74.8	-66.6	-64.1	-41.0
1200	-70.4	-74.7	-73.1	-59.7	-76.6	-67.6	-59.6	-54.0	-73.2	-66.4	-63.4	-44.1
1400	-70.6	-74.7	-73.0	-62.5	-75.8	-68.0	-59.0	-57.8	-73.0	-68.0	-64.2	-50.6
1600	-70.7	-74.7	-73.0	-65.4	-74.9	-68.3	-58.4	-61.7	-72.9	-69.5	-65.0	-57.1
1800	-71.1	-73.2	-70.2	-70.2	-73.9	-77.6	-63.8	-63.8	-74.2	-72.8	-67.2	-67.2
2000	-73.1	-73.6	-70.0	-60.6	-75.5	-74.6	-63.8	-53.3	-72.2	-67.9	-63.5	-52.7
2200	-75.2	-74.0	-69.7	-51.0	-77.1	-71.7	-63.9	-42.7	-70.2	-63.0	-59.8	-38.2
2400	-79.1	-73.7	-69.2	-51.0	-80.7	-70.2	-65.3	-44.4	-71.0	-62.8	-59.1	-39.6
2600	-76.2	-73.3	-67.0	-49.8	-80.2	-70.3	-65.3	-42.9	-67.9	-61.0	-57.3	-38.5
2800	-70.7	-75.8	-68.5	-48.9	-72.5	-69.2	-64.4	-42.3	-67.5	-61.4	-54.5	-37.7
3000	-72.5	-72.6	-65.5	-48.1	-71.9	-67.2	-59.7	-40.4	-72.8	-59.8	-54.8	-36.2
3200	-73.7	-70.5	-63.3	-46.6	-71.7	-65.6	-56.7	-38.4	-66.7	-58.9	-55.1	-34.7
3400	-77.3	-69.2	-62.6	-43.7	-71.7	-69.2	-56.0	-35.7	-65.4	-56.0	-55.2	-32.7
3600	-75.3	-71.4	-63.3	-44.9	-73.9	-69.6	-55.9	-36.2	-68.0	-56.7	-59.0	-32.8
3800	-73.4	-73.6	-64.0	-46.2	-76.1	-70.1	-55.9	-36.8	-70.5	-57.3	-62.8	-33.0
4000	-79.2	-72.0	-58.9	-41.5	-73.6	-63.4	-54.9	-34.9	-66.1	-53.6	-52.4	-32.5
4200	-71.5	-71.8	-59.2	-41.0	-71.0	-63.8	-53.4	-34.9	-65.9	-53.5	-50.8	-32.6
4400	-76.0	-71.6	-59.5	-40.5	-74.2	-64.2	-51.8	-34.9	-65.8	-53.3	-49.2	-32.7
4600	-75.7	-72.7	-60.0	-41.4	-70.8	-64.4	-52.1	-35.4	-65.5	-53.4	-50.6	-33.1
4800	-70.1	-73.8	-60.4	-42.3	-76.6	-64.6	-52.3	-35.9	-65.3	-53.4	-52.0	-33.5
5000	-65.9	-74.4	-62.5	-44.4	-72.2	-65.3	-53.5	-37.2	-67.3	-54.3	-57.0	-34.6
5200	-68.9	-68.3	-63.5	-46.8	-76.2	-69.6	-54.2	-38.3	-64.9	-56.7	-70.8	-35.3
5400	-70.9	-69.0	-61.6	-44.8	-71.3	-66.2	-54.5	-38.1	-65.5	-55.4	-56.4	-35.5
5600	-73.4	-70.6	-65.5	-49.0	-79.5	-69.8	-55.9	-39.7	-68.7	-57.8	-76.7	-36.4
5800	-76.6	-72.2	-62.9	-48.5	-79.6	-66.5	-55.9	-39.9	-67.8	-58.4	-64.1	-36.4
6000	-74.1	-68.1	-62.9	-48.5	-72.7	-66.4	-56.7	-39.7	-64.4	-57.0	-62.4	-36.2
6500	-72.7	-69.8	-62.5	-49.8	-71.0	-64.2	-56.7	-41.4	-68.4	-55.5	-56.2	-37.2
7000	-70.0	-69.8	-57.6	-45.5	-71.6	-57.0	-58.7	-41.5	-56.3	-59.6	-46.0	-39.1

Note: Units are in dBc.

Tone Spacing = 1 MHz

TEST CONDITIONS: V_{DD} = +28 V, Temperature = +25°C

FREQ	Output-IM5 at P_{OUT} = +26 dBm/tone I_{DD} = 400 mA	Output-IM5 at P_{OUT} = +26 dBm/tone I_{DD} = 300 mA	Output-IM5 at P_{OUT} = +26 dBm/tone I_{DD} = 200 mA	Output-IM5 at P_{OUT} = +26 dBm/tone I_{DD} = 100 mA	Output-IM5 at P_{OUT} = +28 dBm/tone I_{DD} = 400 mA	Output-IM5 at P_{OUT} = +28 dBm/tone I_{DD} = 300 mA	Output-IM5 at P_{OUT} = +28 dBm/tone I_{DD} = 200 mA	Output-IM5 at P_{OUT} = +28 dBm/tone I_{DD} = 100 mA	Output-IM5 at P_{OUT} = +30 dBm/tone I_{DD} = 400 mA	Output-IM5 at P_{OUT} = +30 dBm/tone I_{DD} = 300 mA	Output-IM5 at P_{OUT} = +30 dBm/tone I_{DD} = 200 mA	Output-IM5 at P_{OUT} = +30 dBm/tone I_{DD} = 100 mA
(MHz)	+26				+28				+30			
10	-50.4	-53.0	-75.7	-36.4	-61.7	-53.2	-42.7	-35.1	-41.3	-41.7	-42.5	-44.0
100	-68.7	-60.4	-54.2	-35.6	-60.1	-55.7	-38.7	-35.4	-50.7	-43.8	-33.7	-36.6
500	-64.3	-57.1	-45.1	-36.8	-53.7	-53.4	-38.0	-37.2	-40.6	-41.0	-42.1	-42.8
600	-61.3	-56.4	-43.8	-36.8	-52.0	-49.8	-37.6	-37.5	-38.9	-39.0	-39.8	-40.5
800	-62.9	-58.1	-46.5	-38.7	-51.9	-51.5	-52.8	-58.9	-43.1	-42.4	-43.1	-47.2
1000	-59.0	-59.6	-42.0	-36.1	-54.7	-46.5	-36.0	-36.6	-43.9	-42.9	-43.9	-49.2
1200	-59.8	-58.3	-48.3	-39.2	-49.6	-49.8	-42.1	-41.7	-41.2	-43.2	-45.5	-48.1
1400	-61.4	-58.6	-48.2	-40.6	-47.8	-50.2	-44.3	-43.7	-40.4	-42.8	-44.1	-45.3
1600	-63.0	-59.0	-48.1	-42.0	-46.0	-50.6	-46.5	-45.8	-39.6	-42.3	-42.7	-42.6
1800	-65.5	-61.0	-41.7	-41.7	-47.7	-48.0	-44.8	-44.8	-40.7	-40.9	-38.2	-38.2
2000	-62.0	-54.4	-41.9	-41.6	-47.2	-45.1	-42.3	-43.5	-40.2	-38.5	-36.6	-38.7
2200	-58.5	-47.8	-42.1	-41.5	-46.8	-42.1	-39.8	-42.2	-39.7	-36.0	-35.0	-39.2
2400	-61.3	-52.3	-39.4	-37.1	-48.8	-43.2	-40.0	-41.8	-41.3	-36.8	-35.1	-38.7
2600	-56.6	-52.6	-38.0	-36.9	-49.6	-40.8	-36.3	-37.8	-41.0	-33.9	-31.3	-33.7
2800	-55.9	-50.9	-38.1	-38.4	-50.3	-40.0	-34.6	-34.7	-41.3	-32.8	-28.8	-30.9
3000	-53.4	-51.3	-36.3	-38.0	-49.2	-38.2	-33.6	-33.9	-39.5	-31.2	-27.8	-30.9
3200	-51.8	-50.6	-34.2	-34.3	-52.6	-36.7	-32.0	-36.1	-36.5	-34.6	-34.4	-36.8
3400	-50.7	-47.7	-32.1	-33.0	-51.1	-33.8	-30.4	-39.0	-34.5	-31.8	-31.4	-34.3
3600	-50.3	-50.0	-32.5	-32.6	-53.8	-34.3	-30.4	-36.4	-35.2	-32.5	-32.1	-36.1
3800	-49.9	-52.3	-32.8	-32.2	-56.6	-34.9	-30.4	-33.8	-35.9	-33.1	-32.9	-37.8
4000	-48.3	-42.0	-31.7	-32.8	-44.3	-32.4	-30.4	-34.6	-33.1	-30.8	-31.0	-33.7
4200	-47.7	-41.1	-31.8	-33.2	-43.1	-32.4	-32.8	-36.2	-32.9	-30.8	-30.7	-33.6
4400	-47.1	-40.1	-32.0	-33.6	-41.8	-32.4	-35.1	-37.9	-32.7	-30.7	-30.5	-33.6
4600	-46.9	-41.0	-32.4	-34.0	-42.6	-34.4	-35.1	-38.0	-32.8	-30.5	-30.1	-33.2
4800	-46.6	-41.9	-32.8	-34.4	-43.3	-36.4	-35.0	-38.1	-32.9	-30.3	-29.7	-32.8
5000	-47.2	-44.9	-34.1	-34.8	-47.3	-34.8	-35.6	-38.1	-34.3	-31.4	-30.7	-33.5
5200	-47.4	-47.1	-34.7	-35.0	-42.0	-37.2	-35.0	-37.6	-35.0	-30.9	-29.5	-32.1
5400	-48.8	-44.6	-34.6	-35.4	-46.0	-35.4	-33.2	-37.2	-35.4	-33.2	-33.1	-36.2
5600	-49.2	-49.5	-35.8	-35.8	-52.7	-37.0	-33.9	-38.0	-36.8	-34.3	-34.2	-38.1
5800	-49.6	-48.0	-35.7	-35.7	-49.4	-36.7	-33.9	-38.1	-36.6	-33.7	-33.2	-36.9
6000	-50.0	-47.4	-35.4	-35.4	-48.2	-36.4	-33.4	-39.8	-35.8	-32.6	-31.7	-34.9
6500	-52.9	-45.9	-36.3	-35.4	-43.4	-37.4	-34.3	-35.3	-35.8	-30.7	-28.4	-30.8
7000	-48.3	-41.2	-37.4	-38.5	-40.1	-36.2	-34.0	-34.5	-33.0	-30.1	-28.5	-31.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBc.

Tone Spacing = 1 MHz

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA

FREQ	Output-IM5 at P_{OUT} = +18 dBm/tone Temperature = +25°C	Output-IM5 at P_{OUT} = +18 dBm/tone Temperature = -55°C	Output-IM5 at P_{OUT} = +18 dBm/tone Temperature = +95°C	Output-IM5 at P_{OUT} = +20 dBm/tone Temperature = +25°C	Output-IM5 at P_{OUT} = +20 dBm/tone Temperature = -55°C	Output-IM5 at P_{OUT} = +20 dBm/tone Temperature = +95°C	Output-IM5 at P_{OUT} = +22 dBm/tone Temperature = +25°C	Output-IM5 at P_{OUT} = +22 dBm/tone Temperature = -55°C	Output-IM5 at P_{OUT} = +22 dBm/tone Temperature = +95°C	Output-IM5 at P_{OUT} = +24 dBm/tone Temperature = +25°C	Output-IM5 at P_{OUT} = +24 dBm/tone Temperature = -55°C	Output-IM5 at P_{OUT} = +24 dBm/tone Temperature = +95°C
(MHz)	+18			+20			+22			+24		
10	-50.4	-49.6	-49.0	-47.5	-57.5	-47.1	-61.2	-69.9	-54.5	-53.2	-57.9	-57.5
100	-65.3	-63.3	-60.7	-66.2	-62.0	-65.6	-64.0	-71.2	-68.1	-72.8	-67.8	-66.5
500	-77.4	-70.2	-69.4	-80.3	-71.7	-76.0	-76.5	-73.1	-73.1	-72.6	-71.3	-71.3
600	-75.3	-71.8	-69.2	-73.6	-75.8	-70.8	-75.4	-77.9	-71.8	-69.8	-67.9	-78.4
800	-68.6	-73.7	-68.0	-73.5	-87.7	-65.9	-75.2	-73.5	-68.3	-72.3	-68.0	-73.6
1000	-70.4	-74.6	-70.1	-77.4	-77.0	-80.5	-74.8	-70.0	-73.8	-71.7	-64.2	-73.1
1200	-70.4	-74.0	-70.6	-76.6	-77.0	-75.9	-73.2	-73.2	-72.2	-64.4	-64.7	-71.2
1400	-70.4	-73.3	-71.0	-75.8	-77.0	-71.4	-71.6	-76.5	-70.6	-57.0	-65.3	-69.2
1600	-70.7	-74.1	-75.1	-74.9	-74.9	-72.8	-72.9	-74.6	-71.4	-60.0	-63.1	-66.8
1800	-71.1	-75.0	-79.1	-73.9	-72.7	-74.3	-74.2	-72.7	-72.2	-63.0	-60.9	-64.5
2000	-73.1	-74.0	-74.7	-75.5	-75.3	-72.0	-72.2	-70.5	-71.5	-62.2	-60.1	-62.8
2200	-75.2	-73.0	-70.2	-77.1	-77.9	-69.8	-70.2	-68.2	-70.7	-61.5	-59.4	-61.2
2400	-79.1	-71.7	-74.1	-80.7	-73.1	-76.1	-71.0	-70.3	-71.7	-61.4	-59.7	-62.3
2600	-76.2	-74.0	-75.3	-80.2	-75.2	-73.9	-67.9	-66.1	-69.5	-66.8	-58.0	-65.3
2800	-70.7	-71.4	-71.7	-72.5	-78.5	-77.9	-67.5	-66.4	-68.6	-60.0	-61.4	-59.9
3000	-72.5	-74.3	-73.8	-71.9	-74.8	-78.4	-72.8	-69.6	-69.5	-59.8	-63.7	-60.1
3200	-73.7	-75.1	-74.9	-71.7	-78.9	-71.7	-66.7	-64.8	-69.5	-57.6	-54.7	-58.5
3400	-77.3	-69.7	-76.9	-71.7	-76.0	-73.5	-65.4	-64.3	-66.2	-55.8	-53.9	-56.8
3600	-76.3	-72.2	-72.5	-74.9	-77.7	-73.1	-67.7	-65.1	-66.2	-57.3	-54.8	-57.8
3800	-73.4	-70.8	-71.8	-76.1	-74.7	-71.7	-70.5	-65.3	-68.2	-58.4	-55.2	-57.8
4000	-79.2	-75.2	-73.9	-73.6	-74.1	-69.7	-66.1	-62.2	-65.4	-54.3	-51.4	-54.6
4200	-71.5	-71.2	-67.0	-71.0	-75.8	-75.7	-65.9	-66.6	-64.6	-53.9	-57.1	-60.1
4400	-76.0	-73.5	-69.4	-74.2	-74.3	-67.0	-65.8	-62.6	-63.6	-53.6	-50.4	-52.7
4600	-75.7	-73.0	-74.6	-70.8	-67.7	-71.1	-65.5	-64.7	-68.8	-53.7	-53.6	-58.7
4800	-70.1	-71.8	-77.5	-76.6	-68.2	-72.8	-65.3	-62.5	-63.7	-53.8	-50.2	-54.9
5000	-65.9	-66.8	-69.6	-72.2	-67.7	-76.9	-67.3	-64.3	-65.9	-55.8	-51.5	-56.8
5200	-68.9	-72.6	-65.6	-76.2	-71.3	-68.7	-64.9	-65.7	-69.2	-57.7	-53.7	-57.6
5400	-70.9	-67.9	-67.3	-71.3	-68.7	-70.6	-65.5	-63.5	-64.9	-55.9	-51.4	-56.7
5600	-73.4	-72.6	-68.8	-79.5	-70.9	-68.1	-68.7	-62.6	-63.7	-58.0	-53.8	-57.4
5800	-76.6	-77.0	-64.7	-79.6	-70.8	-65.7	-67.8	-67.6	-63.5	-57.1	-53.5	-56.4
6000	-74.1	-75.4	-66.9	-72.7	-76.6	-66.1	-64.4	-66.0	-61.4	-56.3	-53.3	-55.3
6500	-72.7	-69.8	-64.3	-71.0	-72.2	-62.6	-68.4	-62.6	-58.0	-54.2	-52.9	-51.5
7000	-70.0	-70.1	-59.6	-71.6	-64.4	-58.5	-56.3	-55.9	-52.8	-56.5	-56.1	-54.2

Note: Units are in dBc.

Tone Spacing = 1 MHz

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA

FREQ	Output-IM5 at P_{OUT} = +26 dBm/tone Temperature = +25°C	Output-IM5 at P_{OUT} = +26 dBm/tone Temperature = -55°C	Output-IM5 at P_{OUT} = +26 dBm/tone Temperature = +95°C	Output-IM5 at P_{OUT} = +28 dBm/tone Temperature = +25°C	Output-IM5 at P_{OUT} = +28 dBm/tone Temperature = -55°C	Output-IM5 at P_{OUT} = +28 dBm/tone Temperature = +95°C	Output-IM5 at P_{OUT} = +30 dBm/tone Temperature = +25°C	Output-IM5 at P_{OUT} = +30 dBm/tone Temperature = -55°C	Output-IM5 at P_{OUT} = +30 dBm/tone Temperature = +95°C
(MHz)		+26			+28			+30	
10	-50.4	-54.8	-59.2	-61.7	-57.0	-62.0	-41.3	-41.8	-51.9
100	-68.7	-66.0	-68.5	-60.1	-55.5	-61.4	-50.7	-51.7	-52.0
500	-64.3	-60.2	-67.6	-53.7	-53.2	-55.7	-40.6	-41.4	-60.8
600	-61.3	-58.2	-66.5	-52.0	-53.4	-46.7	-38.9	-39.5	-54.9
800	-62.9	-60.1	-69.3	-51.9	-51.7	-52.4	-43.1	-43.0	-59.7
1000	-59.0	-55.7	-60.3	-54.7	-53.8	-53.8	-43.9	-44.3	-50.7
1200	-59.8	-56.2	-61.3	-49.6	-52.2	-51.6	-41.2	-43.6	-50.4
1400	-60.5	-56.7	-62.3	-44.4	-50.6	-49.4	-38.5	-42.8	-50.0
1600	-63.0	-55.7	-64.3	-46.0	-49.4	-48.0	-39.6	-41.8	-45.3
1800	-65.5	-54.6	-66.3	-47.7	-48.1	-46.5	-40.7	-40.8	-40.6
2000	-62.0	-56.0	-63.9	-47.2	-47.1	-47.1	-40.2	-40.0	-40.2
2200	-58.5	-57.3	-61.5	-46.8	-46.2	-47.7	-39.7	-39.3	-39.9
2400	-61.3	-60.1	-57.1	-48.8	-47.8	-50.3	-41.3	-40.6	-42.1
2600	-56.6	-57.4	-56.0	-49.6	-46.4	-53.5	-41.0	-38.8	-42.8
2800	-55.9	-56.2	-56.0	-50.3	-46.4	-52.3	-41.3	-38.6	-43.9
3000	-53.4	-53.0	-52.9	-49.2	-44.6	-52.6	-39.5	-37.0	-41.7
3200	-51.8	-52.0	-51.5	-52.6	-50.1	-54.1	-36.5	-37.1	-36.7
3400	-50.7	-50.7	-51.1	-51.1	-47.2	-40.9	-34.5	-34.7	-33.9
3600	-49.9	-49.5	-50.5	-58.4	-53.8	-60.6	-34.4	-34.6	-34.4
3800	-49.9	-49.9	-50.2	-56.6	-51.1	-58.6	-35.9	-35.7	-35.7
4000	-48.3	-47.7	-49.3	-44.3	-41.0	-39.3	-33.1	-33.5	-32.4
4200	-47.7	-48.5	-50.4	-43.1	-55.2	-54.4	-32.9	-36.6	-36.6
4400	-47.1	-48.0	-48.3	-41.8	-39.1	-39.0	-32.7	-33.4	-32.1
4600	-46.9	-46.1	-47.0	-42.6	-45.3	-42.7	-32.8	-33.8	-34.5
4800	-46.6	-47.7	-47.1	-43.3	-40.2	-40.3	-32.9	-33.7	-33.0
5000	-47.2	-48.0	-47.6	-47.3	-42.1	-42.5	-34.3	-34.3	-35.0
5200	-47.4	-47.1	-48.1	-42.0	-44.0	-45.1	-35.0	-34.4	-36.2
5400	-48.8	-50.7	-48.5	-46.0	-41.6	-47.6	-35.4	-35.7	-35.6
5600	-49.2	-49.1	-49.6	-52.7	-45.8	-52.9	-36.8	-37.4	-37.2
5800	-49.6	-50.4	-49.1	-49.4	-44.4	-49.8	-36.6	-37.1	-37.0
6000	-50.0	-50.5	-49.1	-48.2	-43.9	-43.9	-35.8	-36.4	-36.2
6500	-52.9	-53.3	-52.3	-43.4	-44.7	-43.7	-35.8	-35.5	-35.0
7000	-48.3	-49.5	-46.0	-40.1	-42.0	-38.0	-33.0	-35.5	-30.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dB.

TEST CONDITIONS: V_{DD} = +28 V, Temperature = +25°C

FREQ	Gain at P_{IN} = +10 dBm I_{DD} = 400 mA	Gain at P_{IN} = +10 dBm I_{DD} = 300 mA	Gain at P_{IN} = +10 dBm I_{DD} = 200 mA	Gain at P_{IN} = +10 dBm I_{DD} = 100 mA	Gain at P_{IN} = +15 dBm I_{DD} = 400 mA	Gain at P_{IN} = +15 dBm I_{DD} = 300 mA	Gain at P_{IN} = +15 dBm I_{DD} = 200 mA	Gain at P_{IN} = +15 dBm I_{DD} = 100 mA	Gain at P_{IN} = +18 dBm I_{DD} = 400 mA	Gain at P_{IN} = +18 dBm I_{DD} = 300 mA	Gain at P_{IN} = +18 dBm I_{DD} = 200 mA	Gain at P_{IN} = +18 dBm I_{DD} = 100 mA
(MHz)	+10				+15				+18			
10	18.9	18.9	18.3	16.5	18.7	18.2	17.1	15.4	18.0	17.2	16.2	14.8
100	17.8	17.7	17.2	15.5	17.6	17.2	16.2	14.5	17.2	16.4	15.3	13.9
500	19.5	19.4	18.7	17.2	19.0	18.5	17.6	16.3	18.2	17.6	16.8	15.8
1000	17.4	17.4	16.9	15.5	17.2	16.8	16.0	14.7	16.6	16.0	15.2	14.2
2000	17.8	17.7	17.1	15.7	17.3	16.8	16.1	15.0	16.5	16.0	15.4	14.6
3000	17.1	17.0	16.4	14.8	16.6	16.1	15.2	13.9	15.8	15.1	14.4	13.5
4000	16.1	16.0	15.4	13.7	15.6	15.0	14.0	12.6	14.7	14.0	13.1	12.0
5000	15.7	15.7	15.3	13.9	15.4	14.9	14.1	13.0	14.6	14.1	13.4	12.6
6000	15.0	15.0	14.8	13.6	14.8	14.5	13.9	12.8	14.3	13.8	13.2	12.3
7000	12.1	12.2	12.3	11.9	12.2	12.2	12.1	11.5	12.0	12.0	11.8	11.3

FREQ	Gain at P_{IN} = +20 dBm I_{DD} = 400 mA	Gain at P_{IN} = +20 dBm I_{DD} = 300 mA	Gain at P_{IN} = +20 dBm I_{DD} = 200 mA	Gain at P_{IN} = +20 dBm I_{DD} = 100 mA	Gain at P_{IN} = +22 dBm I_{DD} = 400 mA	Gain at P_{IN} = +22 dBm I_{DD} = 300 mA	Gain at P_{IN} = +22 dBm I_{DD} = 200 mA	Gain at P_{IN} = +22 dBm I_{DD} = 100 mA	Gain at P_{IN} = +24 dBm I_{DD} = 400 mA	Gain at P_{IN} = +24 dBm I_{DD} = 300 mA	Gain at P_{IN} = +24 dBm I_{DD} = 200 mA	Gain at P_{IN} = +24 dBm I_{DD} = 100 mA
(MHz)	+20				+22				+24			
10	17.2	16.4	15.5	14.4	16.3	15.6	14.9	13.9	15.0	14.5	14.0	13.3
100	16.4	15.6	14.7	13.5	15.6	14.9	14.1	13.1	14.5	14.0	13.4	12.7
500	17.5	16.9	16.3	15.4	16.6	16.1	15.6	15.0	15.3	15.0	14.7	14.3
1000	16.0	15.4	14.7	13.9	15.3	14.8	14.2	13.6	14.5	14.1	13.7	13.2
2000	15.9	15.4	14.9	14.3	15.2	14.8	14.4	13.9	14.3	14.0	13.7	13.4
3000	15.0	14.5	13.9	13.1	14.3	13.8	13.3	12.8	13.4	13.0	12.7	12.2
4000	13.9	13.3	12.6	11.7	13.1	12.5	12.0	11.3	12.2	11.8	11.3	10.8
5000	14.0	13.5	13.0	12.3	13.3	12.9	12.5	12.0	12.6	12.3	11.9	11.5
6000	13.7	13.3	12.7	12.0	13.1	12.7	12.2	11.7	12.4	12.0	11.7	11.3
7000	11.8	11.7	11.5	11.1	11.4	11.3	11.1	10.8	10.9	10.8	10.6	10.4

FREQ	Gain at P_{IN} = +26 dBm I_{DD} = 400 mA	Gain at P_{IN} = +26 dBm I_{DD} = 300 mA	Gain at P_{IN} = +26 dBm I_{DD} = 200 mA	Gain at P_{IN} = +26 dBm I_{DD} = 100 mA	Gain at P_{IN} = +28 dBm I_{DD} = 400 mA	Gain at P_{IN} = +28 dBm I_{DD} = 300 mA	Gain at P_{IN} = +28 dBm I_{DD} = 200 mA	Gain at P_{IN} = +28 dBm I_{DD} = 100 mA	Gain at P_{IN} = +30 dBm I_{DD} = 400 mA	Gain at P_{IN} = +30 dBm I_{DD} = 300 mA	Gain at P_{IN} = +30 dBm I_{DD} = 200 mA	Gain at P_{IN} = +30 dBm I_{DD} = 100 mA
(MHz)	+26				+28				+30			
10	13.5	13.1	12.7	12.2	11.6	11.3	11.0	10.7	9.7	9.4	9.2	8.9
100	13.1	12.7	12.3	11.8	11.4	11.2	10.9	10.5	9.6	9.3	9.1	8.9
500	13.7	13.5	13.3	13.0	11.9	11.8	11.7	11.5	10.0	9.9	9.8	9.7
1000	13.4	13.1	12.9	12.5	12.0	11.8	11.6	11.4	10.3	10.2	10.1	10.0
2000	13.0	12.8	12.7	12.5	11.4	11.3	11.2	11.0	9.6	9.5	9.4	9.3
3000	12.2	12.0	11.7	11.5	10.7	10.5	10.4	10.2	9.0	8.8	8.7	8.6
4000	11.2	10.9	10.6	10.2	10.1	9.8	9.5	9.2	8.6	8.4	8.3	8.0
5000	11.7	11.4	11.2	10.9	10.5	10.3	10.2	10.0	9.1	9.0	8.9	8.7
6000	11.5	11.2	11.0	10.6	10.3	10.1	10.0	9.8	8.9	8.8	8.7	8.6
7000	10.1	10.0	9.9	9.7	9.0	8.9	8.9	8.7	7.7	7.6	7.6	7.5

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dB.

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA

FREQ	Gain at P_{IN} = +10 dBm Temperature = +25°C	Gain at P_{IN} = +10 dBm Temperature = -55°C	Gain at P_{IN} = +10 dBm Temperature = +95°C	Gain at P_{IN} = +15 dBm Temperature = +25°C	Gain at P_{IN} = +15 dBm Temperature = -55°C	Gain at P_{IN} = +15 dBm Temperature = +95°C	Gain at P_{IN} = +18 dBm Temperature = +25°C	Gain at P_{IN} = +18 dBm Temperature = -55°C	Gain at P_{IN} = +18 dBm Temperature = +95°C
(MHz)		+10			+15			+18	
10	18.9	20.4	17.6	18.7	19.7	17.5	18.0	18.7	17.1
100	17.8	19.1	16.5	17.6	18.7	16.5	17.2	17.8	16.2
500	19.5	20.8	18.2	19.0	19.9	18.0	18.2	19.0	17.4
1000	17.4	18.8	16.1	17.2	18.2	16.0	16.6	17.4	15.6
2000	17.8	19.1	16.5	17.3	18.3	16.2	16.5	17.4	15.6
3000	17.1	18.5	15.7	16.6	17.7	15.4	15.8	16.6	14.8
4000	16.1	17.5	14.6	15.6	16.7	14.4	14.7	15.6	13.7
5000	15.7	16.9	14.5	15.4	16.3	14.3	14.6	15.4	13.8
6000	15.0	16.4	13.6	14.8	15.9	13.5	14.3	15.2	13.2
7000	12.1	13.8	10.4	12.2	13.8	10.6	12.0	13.5	10.5

FREQ	Gain at P_{IN} = +20 dBm Temperature = +25°C	Gain at P_{IN} = +20 dBm Temperature = -55°C	Gain at P_{IN} = +20 dBm Temperature = +95°C	Gain at P_{IN} = +22 dBm Temperature = +25°C	Gain at P_{IN} = +22 dBm Temperature = -55°C	Gain at P_{IN} = +22 dBm Temperature = +95°C	Gain at P_{IN} = +24 dBm Temperature = +25°C	Gain at P_{IN} = +24 dBm Temperature = -55°C	Gain at P_{IN} = +24 dBm Temperature = +95°C
(MHz)		+20			+22			+24	
10	17.2	17.9	16.5	16.3	16.8	15.7	15.0	15.4	14.6
100	16.4	17.0	15.7	15.6	16.1	15.0	14.5	14.9	14.0
500	17.5	18.1	16.8	16.6	17.1	16.0	15.3	15.7	14.8
1000	16.0	16.8	15.1	15.3	16.0	14.4	14.5	15.1	13.7
2000	15.9	16.7	15.0	15.2	15.9	14.3	14.3	14.9	13.5
3000	15.0	15.9	14.1	14.3	15.1	13.3	13.4	14.1	12.5
4000	13.9	14.8	13.0	13.1	14.0	12.2	12.2	13.1	11.4
5000	14.0	14.7	13.2	13.3	14.1	12.5	12.6	13.3	11.8
6000	13.7	14.6	12.7	13.1	13.9	12.1	12.4	13.2	11.4
7000	11.8	13.2	10.4	11.4	12.7	10.1	10.9	12.1	9.6

FREQ	Gain at P_{IN} = +26 dBm Temperature = +25°C	Gain at P_{IN} = +26 dBm Temperature = -55°C	Gain at P_{IN} = +26 dBm Temperature = +95°C	Gain at P_{IN} = +28 dBm Temperature = +25°C	Gain at P_{IN} = +28 dBm Temperature = -55°C	Gain at P_{IN} = +28 dBm Temperature = +95°C	Gain at P_{IN} = +30 dBm Temperature = +25°C	Gain at P_{IN} = +30 dBm Temperature = -55°C	Gain at P_{IN} = +30 dBm Temperature = +95°C
(MHz)		+26			+28			+30	
10	13.5	13.8	13.1	11.6	11.9	11.3	9.7	9.9	9.3
100	13.1	13.5	12.7	11.4	11.8	11.1	9.6	9.8	9.2
500	13.7	14.1	13.3	11.9	12.2	11.5	10.0	10.3	9.7
1000	13.4	13.9	12.7	12.0	12.4	11.4	10.3	10.6	9.8
2000	13.0	13.4	12.4	11.4	11.6	10.9	9.6	9.8	9.1
3000	12.2	12.8	11.5	10.7	11.2	10.1	9.0	9.3	8.4
4000	11.2	12.1	10.4	10.1	10.8	9.2	8.6	9.1	7.9
5000	11.7	12.3	10.9	10.5	11.0	9.8	9.1	9.5	8.4
6000	11.5	12.2	10.6	10.3	10.9	9.5	8.9	9.4	8.1
7000	10.1	11.1	8.9	9.0	9.9	7.9	7.7	8.4	6.7

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBm.

TEST CONDITIONS: V_{DD} = +28 V, Temperature = +25°C

FREQ	P_{OUT} at P_{IN} = +10 dBm I_{DD} = 400 mA	P_{OUT} at P_{IN} = +10 dBm I_{DD} = 300 mA	P_{OUT} at P_{IN} = +10 dBm I_{DD} = 200 mA	P_{OUT} at P_{IN} = +10 dBm I_{DD} = 100 mA	P_{OUT} at P_{IN} = +15 dBm I_{DD} = 400 mA	P_{OUT} at P_{IN} = +15 dBm I_{DD} = 300 mA	P_{OUT} at P_{IN} = +15 dBm I_{DD} = 200 mA	P_{OUT} at P_{IN} = +15 dBm I_{DD} = 100 mA	P_{OUT} at P_{IN} = +18 dBm I_{DD} = 400 mA	P_{OUT} at P_{IN} = +18 dBm I_{DD} = 300 mA	P_{OUT} at P_{IN} = +18 dBm I_{DD} = 200 mA	P_{OUT} at P_{IN} = +18 dBm I_{DD} = 100 mA
(MHz)	+10				+15				+18			
10	28.9	28.9	28.3	26.5	33.7	33.2	32.1	30.4	36.0	35.2	34.2	32.8
100	27.8	27.7	27.2	25.5	32.6	32.2	31.2	29.5	35.2	34.4	33.3	31.9
500	29.5	29.4	28.7	27.2	34.0	33.5	32.6	31.3	36.2	35.6	34.8	33.8
1000	27.4	27.4	26.9	25.5	32.2	31.8	31.0	29.7	34.6	34.0	33.2	32.2
2000	27.8	27.7	27.1	25.7	32.3	31.8	31.1	30.0	34.5	34.0	33.4	32.6
3000	27.1	27.0	26.4	24.8	31.6	31.1	30.2	28.9	33.8	33.1	32.4	31.5
4000	26.1	26.0	25.4	23.7	30.6	30.0	29.0	27.6	32.7	32.0	31.1	30.0
5000	25.7	25.7	25.3	23.9	30.4	29.9	29.1	28.0	32.6	32.1	31.4	30.6
6000	25.0	25.0	24.8	23.6	29.8	29.5	28.9	27.8	32.3	31.8	31.2	30.3
7000	22.1	22.2	22.3	21.9	27.2	27.2	27.1	26.5	30.0	30.0	29.8	29.3

FREQ	P_{OUT} at P_{IN} = +20 dBm I_{DD} = 400 mA	P_{OUT} at P_{IN} = +20 dBm I_{DD} = 300 mA	P_{OUT} at P_{IN} = +20 dBm I_{DD} = 200 mA	P_{OUT} at P_{IN} = +20 dBm I_{DD} = 100 mA	P_{OUT} at P_{IN} = +22 dBm I_{DD} = 400 mA	P_{OUT} at P_{IN} = +22 dBm I_{DD} = 300 mA	P_{OUT} at P_{IN} = +22 dBm I_{DD} = 200 mA	P_{OUT} at P_{IN} = +22 dBm I_{DD} = 100 mA	P_{OUT} at P_{IN} = +24 dBm I_{DD} = 400 mA	P_{OUT} at P_{IN} = +24 dBm I_{DD} = 300 mA	P_{OUT} at P_{IN} = +24 dBm I_{DD} = 200 mA	P_{OUT} at P_{IN} = +24 dBm I_{DD} = 100 mA
(MHz)	+20				+22				+24			
10	37.2	36.4	35.5	34.4	38.3	37.6	36.9	35.9	39.0	38.5	38.0	37.3
100	36.4	35.6	34.7	33.5	37.6	36.9	36.1	35.1	38.5	38.0	37.4	36.7
500	37.5	36.9	36.3	35.4	38.6	38.1	37.6	37.0	39.3	39.0	38.7	38.3
1000	36.0	35.4	34.7	33.9	37.3	36.8	36.2	35.6	38.5	38.1	37.7	37.2
2000	35.9	35.4	34.9	34.3	37.2	36.8	36.4	35.9	38.3	38.0	37.7	37.4
3000	35.0	34.5	33.9	33.1	36.3	35.8	35.3	34.8	37.4	37.0	36.7	36.2
4000	33.9	33.3	32.6	31.7	35.1	34.5	34.0	33.3	36.2	35.8	35.3	34.8
5000	34.0	33.5	33.0	32.3	35.3	34.9	34.5	34.0	36.6	36.3	35.9	35.5
6000	33.7	33.3	32.7	32.0	35.1	34.7	34.2	33.7	36.4	36.0	35.7	35.3
7000	31.8	31.7	31.5	31.1	33.4	33.3	33.1	32.8	34.9	34.8	34.6	34.4

FREQ	P_{OUT} at P_{IN} = +26 dBm I_{DD} = 400 mA	P_{OUT} at P_{IN} = +26 dBm I_{DD} = 300 mA	P_{OUT} at P_{IN} = +26 dBm I_{DD} = 200 mA	P_{OUT} at P_{IN} = +26 dBm I_{DD} = 100 mA	P_{OUT} at P_{IN} = +28 dBm I_{DD} = 400 mA	P_{OUT} at P_{IN} = +28 dBm I_{DD} = 300 mA	P_{OUT} at P_{IN} = +28 dBm I_{DD} = 200 mA	P_{OUT} at P_{IN} = +28 dBm I_{DD} = 100 mA	P_{OUT} at P_{IN} = +30 dBm I_{DD} = 400 mA	P_{OUT} at P_{IN} = +30 dBm I_{DD} = 300 mA	P_{OUT} at P_{IN} = +30 dBm I_{DD} = 200 mA	P_{OUT} at P_{IN} = +30 dBm I_{DD} = 100 mA
(MHz)	+26				+28				+30			
10	39.5	39.1	38.7	38.2	39.6	39.3	39.0	38.7	39.7	39.4	39.2	38.9
100	39.1	38.7	38.3	37.8	39.4	39.2	38.9	38.5	39.6	39.3	39.1	38.9
500	39.7	39.5	39.3	39.0	39.9	39.8	39.7	39.5	40.0	39.9	39.8	39.7
1000	39.4	39.1	38.9	38.5	40.0	39.8	39.6	39.4	40.3	40.2	40.1	40.0
2000	39.0	38.8	38.7	38.5	39.4	39.3	39.2	39.0	39.6	39.5	39.4	39.3
3000	38.2	38.0	37.7	37.5	38.7	38.5	38.4	38.2	39.0	38.8	38.7	38.6
4000	37.2	36.9	36.6	36.2	38.1	37.8	37.5	37.2	38.6	38.4	38.3	38.0
5000	37.7	37.4	37.2	36.9	38.5	38.3	38.2	38.0	39.1	39.0	38.9	38.7
6000	37.5	37.2	37.0	36.6	38.3	38.1	38.0	37.8	38.9	38.8	38.7	38.6
7000	36.1	36.0	35.9	35.7	37.0	36.9	36.9	36.7	37.7	37.6	37.6	37.5

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBm.

TEST CONDITIONS: I_{DD} = 400 mA, Temperature = +25°C

FREQ	P_{OUT} at P_{IN} = +10 dBm V_{DD} = +28 V	P_{OUT} at P_{IN} = +10 dBm V_{DD} = +24 V	P_{OUT} at P_{IN} = +10 dBm V_{DD} = +20 V	P_{OUT} at P_{IN} = +15 dBm V_{DD} = +28 V	P_{OUT} at P_{IN} = +15 dBm V_{DD} = +24 V	P_{OUT} at P_{IN} = +15 dBm V_{DD} = +20 V	P_{OUT} at P_{IN} = +18 dBm V_{DD} = +28 V	P_{OUT} at P_{IN} = +18 dBm V_{DD} = +24 V	P_{OUT} at P_{IN} = +18 dBm V_{DD} = +20 V
(MHz)	+10			+15			+18		
10	28.9	29.0	28.9	33.7	33.6	33.4	36.0	35.8	35.4
100	27.8	27.7	27.6	32.6	32.5	32.3	35.2	34.9	34.5
500	29.5	29.3	28.9	34.0	33.7	33.2	36.2	35.8	35.2
1000	27.4	27.3	26.9	32.2	32.0	31.6	34.6	34.3	33.9
2000	27.8	27.6	27.4	32.3	32.1	31.8	34.5	34.3	34.0
3000	27.1	27.1	26.9	31.6	31.5	31.3	33.8	33.6	33.4
4000	26.1	26.0	25.8	30.6	30.4	30.2	32.7	32.5	32.1
5000	25.7	25.6	25.4	30.4	30.2	29.9	32.6	32.4	32.0
6000	25.0	24.8	24.3	29.8	29.6	29.0	32.3	32.0	31.4
7000	22.1	21.2	19.9	27.2	26.3	24.9	30.0	29.2	27.9

FREQ	P_{OUT} at P_{IN} = +20 dBm V_{DD} = +28 V	P_{OUT} at P_{IN} = +20 dBm V_{DD} = +24 V	P_{OUT} at P_{IN} = +20 dBm V_{DD} = +20 V	P_{OUT} at P_{IN} = +22 dBm V_{DD} = +28 V	P_{OUT} at P_{IN} = +22 dBm V_{DD} = +24 V	P_{OUT} at P_{IN} = +22 dBm V_{DD} = +20 V	P_{OUT} at P_{IN} = +24 dBm V_{DD} = +28 V	P_{OUT} at P_{IN} = +24 dBm V_{DD} = +24 V	P_{OUT} at P_{IN} = +24 dBm V_{DD} = +20 V
(MHz)	+20			+22			+24		
10	37.2	36.9	36.3	38.3	37.7	36.8	39.0	38.2	37.2
100	36.4	36.1	35.6	37.6	37.1	36.3	38.5	37.8	36.7
500	37.5	37.0	36.3	38.6	37.9	36.9	39.3	38.4	37.3
1000	36.0	35.7	35.2	37.3	36.9	36.3	38.5	37.9	37.1
2000	35.9	35.6	35.3	37.2	36.9	36.3	38.3	37.8	36.9
3000	35.0	34.9	34.5	36.3	36.0	35.5	37.4	37.0	36.3
4000	33.9	33.7	33.3	35.1	34.8	34.4	36.2	36.0	35.5
5000	34.0	33.7	33.4	35.3	35.1	34.6	36.6	36.3	35.8
6000	33.7	33.4	32.8	35.1	34.7	34.1	36.4	36.0	35.2
7000	31.8	31.0	29.7	33.4	32.6	31.4	34.9	34.1	32.9

FREQ	P_{OUT} at P_{IN} = +26 dBm V_{DD} = +28 V	P_{OUT} at P_{IN} = +26 dBm V_{DD} = +24 V	P_{OUT} at P_{IN} = +26 dBm V_{DD} = +20 V	P_{OUT} at P_{IN} = +28 dBm V_{DD} = +28 V	P_{OUT} at P_{IN} = +28 dBm V_{DD} = +24 V	P_{OUT} at P_{IN} = +28 dBm V_{DD} = +20 V	P_{OUT} at P_{IN} = +30 dBm V_{DD} = +28 V	P_{OUT} at P_{IN} = +30 dBm V_{DD} = +24 V	P_{OUT} at P_{IN} = +30 dBm V_{DD} = +20 V
(MHz)	+26			+28			+30		
10	39.5	38.5	37.3	39.6	38.6	37.3	39.7	38.6	37.3
100	39.1	38.2	37.1	39.4	38.5	37.2	39.6	38.5	37.2
500	39.7	38.8	37.6	39.9	38.9	37.6	40.0	39.0	37.7
1000	39.4	38.7	37.7	40.0	39.2	38.0	40.3	39.4	38.1
2000	39.0	38.3	37.3	39.4	38.5	37.4	39.6	38.7	37.5
3000	38.2	37.7	36.8	38.7	38.0	37.0	39.0	38.2	37.1
4000	37.2	36.9	36.4	38.1	37.7	37.0	38.6	38.1	37.3
5000	37.7	37.3	36.7	38.5	38.1	37.3	39.1	38.5	37.5
6000	37.5	36.9	36.0	38.3	37.6	36.7	38.9	38.2	37.2
7000	36.1	35.3	34.2	37.0	36.2	35.1	37.7	36.9	35.8

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBm.

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA

FREQ	P_{OUT} at P_{IN} = +10 dBm Temperature = +25°C	P_{OUT} at P_{IN} = +10 dBm Temperature = -55°C	P_{OUT} at P_{IN} = +10 dBm Temperature = +95°C	P_{OUT} at P_{IN} = +15 dBm Temperature = +25°C	P_{OUT} at P_{IN} = +15 dBm Temperature = -55°C	P_{OUT} at P_{IN} = +15 dBm Temperature = +95°C	P_{OUT} at P_{IN} = +18 dBm Temperature = +25°C	P_{OUT} at P_{IN} = +18 dBm Temperature = -55°C	P_{OUT} at P_{IN} = +18 dBm Temperature = +95°C
(MHz)		+10			+15			+18	
10	28.9	30.4	27.6	33.7	34.7	32.5	36.0	36.7	35.1
100	27.8	29.1	26.5	32.6	33.7	31.5	35.2	35.8	34.2
500	29.5	30.8	28.2	34.0	34.9	33.0	36.2	37.0	35.4
1000	27.4	28.8	26.1	32.2	33.2	31.0	34.6	35.4	33.6
2000	27.8	29.1	26.5	32.3	33.3	31.2	34.5	35.4	33.6
3000	27.1	28.5	25.7	31.6	32.7	30.4	33.8	34.6	32.8
4000	26.1	27.5	24.6	30.6	31.7	29.4	32.7	33.6	31.7
5000	25.7	26.9	24.5	30.4	31.3	29.3	32.6	33.4	31.8
6000	25.0	26.4	23.6	29.8	30.9	28.5	32.3	33.2	31.2
7000	22.1	23.8	20.4	27.2	28.8	25.6	30.0	31.5	28.5

FREQ	P_{OUT} at P_{IN} = +20 dBm Temperature = +25°C	P_{OUT} at P_{IN} = +20 dBm Temperature = -55°C	P_{OUT} at P_{IN} = +20 dBm Temperature = +95°C	P_{OUT} at P_{IN} = +22 dBm Temperature = +25°C	P_{OUT} at P_{IN} = +22 dBm Temperature = -55°C	P_{OUT} at P_{IN} = +22 dBm Temperature = +95°C	P_{OUT} at P_{IN} = +24 dBm Temperature = +25°C	P_{OUT} at P_{IN} = +24 dBm Temperature = -55°C	P_{OUT} at P_{IN} = +24 dBm Temperature = +95°C
(MHz)		+20			+22			+24	
10	37.2	37.9	36.5	38.3	38.8	37.7	39.0	39.4	38.6
100	36.4	37.0	35.7	37.6	38.1	37.0	38.5	38.9	38.0
500	37.5	38.1	36.8	38.6	39.1	38.0	39.3	39.7	38.8
1000	36.0	36.8	35.1	37.3	38.0	36.4	38.5	39.1	37.7
2000	35.9	36.7	35.0	37.2	37.9	36.3	38.3	38.9	37.5
3000	35.0	35.9	34.1	36.3	37.1	35.3	37.4	38.1	36.5
4000	33.9	34.8	33.0	35.1	36.0	34.2	36.2	37.1	35.4
5000	34.0	34.7	33.2	35.3	36.1	34.5	36.6	37.3	35.8
6000	33.7	34.6	32.7	35.1	35.9	34.1	36.4	37.2	35.4
7000	31.8	33.2	30.4	33.4	34.7	32.1	34.9	36.1	33.6

FREQ	P_{OUT} at P_{IN} = +26 dBm Temperature = +25°C	P_{OUT} at P_{IN} = +26 dBm Temperature = -55°C	P_{OUT} at P_{IN} = +26 dBm Temperature = +95°C	P_{OUT} at P_{IN} = +28 dBm Temperature = +25°C	P_{OUT} at P_{IN} = +28 dBm Temperature = -55°C	P_{OUT} at P_{IN} = +28 dBm Temperature = +95°C	P_{OUT} at P_{IN} = +30 dBm Temperature = +25°C	P_{OUT} at P_{IN} = +30 dBm Temperature = -55°C	P_{OUT} at P_{IN} = +30 dBm Temperature = +95°C
(MHz)		+26			+28			+30	
10	39.5	39.8	39.1	39.6	39.9	39.3	39.7	39.9	39.3
100	39.1	39.5	38.7	39.4	39.8	39.1	39.6	39.8	39.2
500	39.7	40.1	39.3	39.9	40.2	39.5	40.0	40.3	39.7
1000	39.4	39.9	38.7	40.0	40.4	39.4	40.3	40.6	39.8
2000	39.0	39.4	38.4	39.4	39.6	38.9	39.6	39.8	39.1
3000	38.2	38.8	37.5	38.7	39.2	38.1	39.0	39.3	38.4
4000	37.2	38.1	36.4	38.1	38.8	37.2	38.6	39.1	37.9
5000	37.7	38.3	36.9	38.5	39.0	37.8	39.1	39.5	38.4
6000	37.5	38.2	36.6	38.3	38.9	37.5	38.9	39.4	38.1
7000	36.1	37.1	34.9	37.0	37.9	35.9	37.7	38.4	36.7

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in W.

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA

FREQ	P_{DISS} at P_{IN} = +10 dBm Temperature = +25°C	P_{DISS} at P_{IN} = +10 dBm Temperature = -55°C	P_{DISS} at P_{IN} = +10 dBm Temperature = +95°C	P_{DISS} at P_{IN} = +15 dBm Temperature = +25°C	P_{DISS} at P_{IN} = +15 dBm Temperature = -55°C	P_{DISS} at P_{IN} = +15 dBm Temperature = +95°C	P_{DISS} at P_{IN} = +18 dBm Temperature = +25°C	P_{DISS} at P_{IN} = +18 dBm Temperature = -55°C	P_{DISS} at P_{IN} = +18 dBm Temperature = +95°C
(MHz)		+10			+15			+18	
10	9.3	8.3	9.7	7.3	6.2	8.1	6.1	5.4	6.7
100	9.4	8.7	10.0	7.6	6.7	8.5	6.5	6.1	7.2
500	9.1	8.2	9.6	7.3	6.6	8.0	6.6	6.0	7.1
1000	9.9	9.1	10.2	8.5	7.8	9.1	8.1	7.5	8.4
2000	10.0	9.2	10.3	9.1	8.7	9.5	9.4	9.3	9.5
3000	10.3	9.7	10.6	9.9	9.4	10.1	10.3	10.2	10.3
4000	10.5	10.1	10.9	10.5	10.4	10.7	11.5	11.8	11.3
5000	10.9	10.3	11.1	10.7	10.6	10.9	10.2	10.5	10.0
6000	11.1	10.5	11.4	9.2	8.8	9.6	9.2	9.2	9.3
7000	10.4	9.7	10.6	9.6	8.8	10.0	9.2	8.5	9.6

FREQ	P_{DISS} at P_{IN} = +20 dBm Temperature = +25°C	P_{DISS} at P_{IN} = +20 dBm Temperature = -55°C	P_{DISS} at P_{IN} = +20 dBm Temperature = +95°C	P_{DISS} at P_{IN} = +22 dBm Temperature = +25°C	P_{DISS} at P_{IN} = +22 dBm Temperature = -55°C	P_{DISS} at P_{IN} = +22 dBm Temperature = +95°C	P_{DISS} at P_{IN} = +24 dBm Temperature = +25°C	P_{DISS} at P_{IN} = +24 dBm Temperature = -55°C	P_{DISS} at P_{IN} = +24 dBm Temperature = +95°C
(MHz)		+20			+22			+24	
10	5.5	4.9	6.1	5.0	4.4	5.5	4.6	4.2	5.1
100	6.2	5.8	6.6	5.9	5.6	6.3	5.6	5.5	6.1
500	6.2	5.8	6.6	5.9	5.5	6.4	5.9	5.4	6.3
1000	8.1	7.7	8.3	8.3	8.0	8.6	8.8	8.3	9.0
2000	10.1	10.0	10.1	10.9	10.9	10.8	10.3	10.1	10.4
3000	11.2	11.1	11.1	10.8	10.8	10.7	11.5	11.5	11.4
4000	11.3	11.7	10.8	12.3	12.7	11.7	13.4	13.8	12.8
5000	10.9	11.2	10.5	11.7	12.1	11.2	12.6	13.0	12.0
6000	9.5	9.7	9.4	10.1	10.3	9.8	10.7	10.9	10.4
7000	9.1	8.6	9.5	9.3	8.9	9.5	9.6	9.3	9.8

FREQ	P_{DISS} at P_{IN} = +26 dBm Temperature = +25°C	P_{DISS} at P_{IN} = +26 dBm Temperature = -55°C	P_{DISS} at P_{IN} = +26 dBm Temperature = +95°C	P_{DISS} at P_{IN} = +28 dBm Temperature = +25°C	P_{DISS} at P_{IN} = +28 dBm Temperature = -55°C	P_{DISS} at P_{IN} = +28 dBm Temperature = +95°C	P_{DISS} at P_{IN} = +30 dBm Temperature = +25°C	P_{DISS} at P_{IN} = +30 dBm Temperature = -55°C	P_{DISS} at P_{IN} = +30 dBm Temperature = +95°C
(MHz)		+26			+28			+30	
10	4.4	4.0	4.8	4.3	4.0	4.6	4.5	4.2	4.8
100	5.6	5.6	6.1	5.8	5.7	6.2	4.5	4.5	5.0
500	6.1	5.7	6.4	4.9	4.4	5.2	4.7	4.2	5.0
1000	7.9	7.3	8.2	8.0	7.3	8.3	7.8	7.0	8.3
2000	10.5	10.1	10.8	10.6	10.0	10.9	10.6	9.9	11.0
3000	12.2	11.8	12.3	12.2	11.4	12.5	12.0	11.1	12.4
4000	14.4	14.8	13.9	15.1	15.2	14.9	14.8	14.8	15.6
5000	13.5	13.8	12.9	14.1	14.2	13.6	14.4	14.1	14.1
6000	11.4	11.4	11.1	12.0	11.9	11.7	12.5	12.2	12.3
7000	10.0	9.9	10.1	10.7	10.5	10.5	11.2	10.8	11.1

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in percentages.

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -1.6 V, I_G = 0.01 mA

FREQ	PAE at P_{IN} = +10 dBm Temperature = +25°C	PAE at P_{IN} = +10 dBm Temperature = -55°C	PAE at P_{IN} = +10 dBm Temperature = +95°C	PAE at P_{IN} = +15 dBm Temperature = +25°C	PAE at P_{IN} = +15 dBm Temperature = -55°C	PAE at P_{IN} = +15 dBm Temperature = +95°C	PAE at P_{IN} = +18 dBm Temperature = +25°C	PAE at P_{IN} = +18 dBm Temperature = -55°C	PAE at P_{IN} = +18 dBm Temperature = +95°C
(MHz)		+10			+15			+18	
10	7.7	11.6	5.5	24.0	32.3	17.6	39.2	46.0	31.9
100	5.9	8.5	4.2	19.3	25.9	13.9	33.3	38.4	26.5
500	8.8	12.8	6.4	25.7	31.9	20.0	38.8	45.3	32.7
1000	5.3	7.7	3.8	16.3	21.3	12.1	26.3	31.9	21.3
2000	5.7	8.2	4.1	15.7	20.0	12.1	23.4	27.4	19.5
3000	4.8	6.9	3.4	12.9	16.8	9.8	19.2	22.9	15.8
4000	3.7	5.4	2.6	10.2	12.8	7.6	14.5	16.9	12.1
5000	3.4	4.7	2.5	9.8	12.0	7.6	14.6	16.8	12.5
6000	2.9	4.3	2.1	9.1	12.1	6.6	15.0	18.0	11.9
7000	1.4	2.3	0.9	4.9	7.6	3.2	9.3	13.6	6.3

FREQ	PAE at P_{IN} = +20 dBm Temperature = +25°C	PAE at P_{IN} = +20 dBm Temperature = -55°C	PAE at P_{IN} = +20 dBm Temperature = +95°C	PAE at P_{IN} = +22 dBm Temperature = +25°C	PAE at P_{IN} = +22 dBm Temperature = -55°C	PAE at P_{IN} = +22 dBm Temperature = +95°C	PAE at P_{IN} = +24 dBm Temperature = +25°C	PAE at P_{IN} = +24 dBm Temperature = -55°C	PAE at P_{IN} = +24 dBm Temperature = +95°C
(MHz)		+20			+22			+24	
10	48.6	54.9	42.0	56.8	62.5	50.9	62.8	67.1	57.8
100	41.4	46.1	35.6	49.1	53.4	43.6	55.5	58.7	50.3
500	47.7	53.4	41.7	55.4	60.4	49.9	59.9	64.4	55.4
1000	33.2	38.5	28.2	39.7	45.1	34.4	45.8	51.0	40.3
2000	28.3	32.6	24.2	33.4	37.7	29.0	38.0	42.1	33.5
3000	23.1	27.0	19.5	27.0	31.2	23.1	30.7	34.8	26.4
4000	17.1	19.8	14.8	19.8	22.8	17.3	22.3	25.6	19.7
5000	18.0	20.3	15.7	21.5	24.0	19.0	25.0	27.7	22.3
6000	19.0	22.2	15.7	23.1	26.6	19.6	27.2	30.8	23.2
7000	13.3	18.4	9.5	17.7	23.6	13.2	22.4	28.3	17.1

FREQ	PAE at P_{IN} = +26 dBm Temperature = +25°C	PAE at P_{IN} = +26 dBm Temperature = -55°C	PAE at P_{IN} = +26 dBm Temperature = +95°C	PAE at P_{IN} = +28 dBm Temperature = +25°C	PAE at P_{IN} = +28 dBm Temperature = -55°C	PAE at P_{IN} = +28 dBm Temperature = +95°C	PAE at P_{IN} = +30 dBm Temperature = +25°C	PAE at P_{IN} = +30 dBm Temperature = -55°C	PAE at P_{IN} = +30 dBm Temperature = +95°C
(MHz)		+26			+28			+30	
10	65.7	69.4	61.7	66.5	69.5	62.9	64.8	67.8	61.4
100	58.9	61.2	54.4	60.1	62.3	55.9	59.4	61.1	55.2
500	62.3	66.0	58.2	62.7	66.3	59.0	61.6	64.9	57.9
1000	49.9	54.7	45.0	52.0	56.3	47.5	52.7	56.9	48.2
2000	41.0	44.6	36.8	41.7	44.6	37.9	40.9	43.8	37.2
3000	33.2	37.3	29.0	34.6	38.7	30.5	34.6	38.6	30.5
4000	24.8	28.3	21.7	26.9	30.3	23.0	28.1	31.2	23.6
5000	28.2	31.0	25.2	30.5	33.3	27.4	31.7	34.4	28.4
6000	30.6	34.3	26.5	32.7	36.3	28.6	33.3	36.8	29.3
7000	26.0	31.5	20.6	27.9	33.1	22.7	28.4	33.6	23.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBc.

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 400 mA @ Temperature = +25°C

FREQ	2ND Harmonic vs POUT POUT = +18 dBm	2ND Harmonic vs POUT POUT = +20 dBm	2ND Harmonic vs POUT POUT = +22 dBm	2ND Harmonic vs POUT POUT = +24 dBm	2ND Harmonic vs POUT POUT = +26 dBm	2ND Harmonic vs POUT POUT = +28 dBm	2ND Harmonic vs POUT POUT = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-53.9	-54.2	-55.8	-53.6	-52.1	-47.1	-42.7
100	-53.8	-52.4	-50.4	-48.2	-46.6	-45.4	-45.0
500	-49.3	-47.5	-45.6	-43.8	-42.3	-41.4	-42.2
1000	-44.8	-42.7	-40.8	-39.4	-38.0	-37.4	-39.4
2000	-51.6	-49.6	-47.4	-45.3	-43.8	-42.2	-40.7
3000	-50.8	-49.4	-47.2	-45.3	-42.7	-38.3	-30.7
4000	-50.2	-48.4	-46.1	-44.2	-42.2	-40.1	-36.3
5000	-43.2	-41.3	-39.1	-37.1	-34.8	-32.6	-33.1
6000	-43.7	-41.7	-39.4	-37.5	-35.3	-33.2	-31.6
7000	-39.3	-37.1	-35.1	-33.2	-33.4	-33.2	-33.2

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 300 mA @ Temperature = +25°C

FREQ	2ND Harmonic vs POUT POUT = +18 dBm	2ND Harmonic vs POUT POUT = +20 dBm	2ND Harmonic vs POUT POUT = +22 dBm	2ND Harmonic vs POUT POUT = +24 dBm	2ND Harmonic vs POUT POUT = +26 dBm	2ND Harmonic vs POUT POUT = +28 dBm	2ND Harmonic vs POUT POUT = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-49.0	-45.5	-42.6	-40.3	-37.2	-33.8	-29.7
100	-55.3	-52.7	-49.9	-47.0	-43.7	-39.6	-34.6
500	-54.0	-52.2	-49.9	-47.4	-43.3	-37.5	-31.1
1000	-52.6	-51.7	-49.9	-47.7	-42.9	-35.3	-27.7
2000	-51.8	-51.1	-48.4	-46.0	-43.1	-39.3	-34.3
3000	-44.3	-42.0	-39.2	-35.7	-31.4	-25.6	-20.6
4000	-47.4	-45.6	-42.9	-40.4	-36.9	-31.8	-25.5
5000	-43.1	-40.5	-38.5	-36.1	-33.4	-30.2	-30.5
6000	-44.1	-42.0	-39.9	-37.9	-35.8	-33.9	-32.5
7000	-40.1	-38.3	-36.4	-34.7	-35.0	-34.9	-34.7

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 200 mA @ Temperature = +25°C

FREQ	2ND Harmonic vs POUT POUT = +18 dBm	2ND Harmonic vs POUT POUT = +20 dBm	2ND Harmonic vs POUT POUT = +22 dBm	2ND Harmonic vs POUT POUT = +24 dBm	2ND Harmonic vs POUT POUT = +26 dBm	2ND Harmonic vs POUT POUT = +28 dBm	2ND Harmonic vs POUT POUT = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-38.1	-35.8	-33.0	-30.1	-27.0	-23.4	-19.0
100	-41.7	-39.1	-36.3	-33.3	-29.9	-25.9	-21.1
500	-41.4	-38.6	-35.5	-31.9	-27.8	-23.7	-19.7
1000	-41.1	-38.2	-34.6	-30.5	-25.7	-21.6	-18.4
2000	-44.0	-41.1	-38.4	-35.2	-31.4	-26.9	-22.4
3000	-34.8	-32.0	-28.7	-24.8	-20.4	-16.7	-14.3
4000	-40.3	-37.6	-34.5	-30.8	-25.9	-21.6	-19.4
5000	-39.5	-37.6	-34.6	-30.5	-25.8	-24.6	-24.6
6000	-44.1	-42.2	-40.1	-38.1	-35.8	-31.4	-31.2
7000	-42.3	-40.9	-39.8	-39.6	-39.8	-39.8	-39.7

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 100 mA @ Temperature = +25°C

FREQ	2ND Harmonic vs POUT POUT = +18 dBm	2ND Harmonic vs POUT POUT = +20 dBm	2ND Harmonic vs POUT POUT = +22 dBm	2ND Harmonic vs POUT POUT = +24 dBm	2ND Harmonic vs POUT POUT = +26 dBm	2ND Harmonic vs POUT POUT = +28 dBm	2ND Harmonic vs POUT POUT = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-26.6	-24.1	-21.2	-18.2	-15.1	-12.6	-10.9
100	-28.4	-25.8	-22.9	-19.8	-16.4	-13.8	-12.0
500	-27.4	-24.7	-21.6	-18.7	-16.1	-14.2	-13.1
1000	-26.4	-23.5	-20.3	-17.7	-15.7	-14.6	-14.1
2000	-30.6	-27.9	-24.8	-21.6	-18.7	-16.8	-15.6
3000	-22.0	-19.1	-16.1	-13.8	-12.3	-11.6	-12.1
4000	-27.6	-24.3	-20.9	-18.3	-16.5	-15.3	-15.3
5000	-29.2	-25.5	-22.2	-19.7	-18.7	-19.1	-19.0
6000	-40.1	-37.4	-33.6	-30.1	-27.1	-25.5	-25.4
7000	-52.5	-52.4	-50.6	-49.0	-48.8	-48.7	-48.5

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBc.

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 400 mA @ Temperature = +25°C

FREQ	2ND Harmonic vs P_{OUT} P_{OUT} = +18 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +20 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +22 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +24 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +26 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +28 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-53.9	-54.2	-55.8	-53.6	-52.1	-47.1	-42.7
100	-53.8	-52.4	-50.4	-48.2	-46.6	-45.4	-45.0
500	-49.3	-47.5	-45.6	-43.8	-42.3	-41.4	-42.2
1000	-44.8	-42.7	-40.8	-39.4	-38.0	-37.4	-39.4
2000	-51.6	-49.6	-47.4	-45.3	-43.8	-42.2	-40.7
3000	-50.8	-49.4	-47.2	-45.3	-42.7	-38.3	-30.7
4000	-50.2	-48.4	-46.1	-44.2	-42.2	-40.1	-36.3
5000	-43.2	-41.3	-39.1	-37.1	-34.8	-32.6	-33.1
6000	-43.7	-41.7	-39.4	-37.5	-35.3	-33.2	-31.6
7000	-39.3	-37.1	-35.1	-33.2	-33.4	-33.2	-33.2

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 400 mA @ Temperature = -55°C

FREQ	2ND Harmonic vs P_{OUT} P_{OUT} = +18 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +20 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +22 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +24 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +26 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +28 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-67.2	-72.1	-66.1	-80.7	-64.1	-54.2	-45.5
100	-51.9	-50.1	-48.3	-46.6	-45.5	-44.5	-45.2
500	-48.2	-46.4	-44.7	-43.2	-42.2	-42.3	-47.3
1000	-44.6	-42.8	-41.2	-39.7	-39.0	-40.1	-49.4
2000	-49.7	-48.2	-46.2	-44.1	-42.3	-40.6	-38.7
3000	-49.0	-46.8	-45.3	-43.6	-42.1	-39.0	-30.8
4000	-47.3	-45.6	-43.3	-41.4	-39.3	-36.9	-33.5
5000	-43.0	-40.8	-38.8	-36.7	-34.4	-32.0	-30.7
6000	-43.7	-41.7	-39.5	-37.5	-35.3	-33.2	-30.6
7000	-38.3	-36.3	-34.3	-32.2	-31.1	-30.8	-30.6

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 400 mA @ Temperature = +95°C

FREQ	2ND Harmonic vs P_{OUT} P_{OUT} = +18 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +20 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +22 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +24 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +26 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +28 dBm	2ND Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-46.0	-45.1	-45.4	-44.7	-44.1	-42.5	-39.5
100	-60.4	-55.9	-53.4	-51.3	-48.4	-46.4	-44.6
500	-52.7	-49.3	-47.1	-45.1	-42.7	-41.1	-40.2
1000	-44.9	-42.7	-40.7	-38.8	-37.1	-35.8	-35.8
2000	-51.2	-49.2	-47.3	-45.4	-43.7	-42.1	-40.9
3000	-50.1	-48.5	-46.1	-44.1	-41.3	-36.8	-30.1
4000	-51.9	-50.6	-48.6	-46.5	-44.7	-42.4	-38.9
5000	-43.1	-40.8	-38.8	-36.8	-34.6	-34.4	-34.3
6000	-43.2	-41.0	-39.1	-37.0	-35.0	-32.6	-32.6
7000	-39.3	-37.2	-35.0	-35.2	-35.1	-35.1	-35.1

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBc.

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 400 mA @ Temperature = +25°C

FREQ	3RD Harmonic vs P_{OUT} P_{OUT} = +18 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +20 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +22 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +24 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +26 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +28 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-64.3	-62.2	-58.7	-55.5	-51.5	-47.3	-42.2
100	-68.0	-65.2	-60.1	-56.5	-52.9	-49.0	-44.5
500	-73.8	-70.7	-66.2	-64.2	-59.1	-55.1	-51.0
1000	-68.1	-64.4	-60.7	-56.9	-51.8	-47.1	-41.9
2000	-67.8	-64.7	-61.8	-56.4	-52.3	-47.4	-42.2
3000	-68.2	-64.4	-60.9	-55.5	-51.8	-46.5	-40.6
4000	-69.1	-63.2	-60.2	-55.4	-50.7	-45.2	-38.8
5000	-71.8	-67.2	-63.2	-60.0	-55.2	-50.7	-45.0
6000	-73.2	-72.6	-67.8	-61.6	-58.7	-54.7	-47.9
7000	-75.2	-72.1	-67.3	-63.4	-56.7	-55.4	-55.8

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 300 mA @ Temperature = +25°C

FREQ	3RD Harmonic vs P_{OUT} P_{OUT} = +18 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +20 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +22 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +24 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +26 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +28 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-62.8	-59.8	-55.1	-51.7	-46.9	-41.8	-36.1
100	-67.0	-61.8	-59.3	-53.8	-49.1	-44.4	-39.2
500	-73.3	-67.7	-66.1	-60.8	-56.0	-51.9	-46.7
1000	-65.4	-60.6	-56.0	-51.6	-47.0	-41.5	-35.5
2000	-67.5	-60.8	-56.4	-52.5	-47.3	-42.0	-36.0
3000	-65.0	-60.9	-56.9	-51.8	-46.5	-40.3	-33.6
4000	-65.5	-60.6	-55.0	-50.8	-45.0	-38.0	-30.8
5000	-72.2	-65.5	-61.9	-56.6	-51.6	-45.3	-39.0
6000	-77.5	-70.6	-62.9	-61.7	-57.3	-51.9	-43.8
7000	-72.6	-70.6	-64.3	-61.0	-55.7	-52.8	-54.4

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 200 mA @ Temperature = +25°C

FREQ	3RD Harmonic vs P_{OUT} P_{OUT} = +18 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +20 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +22 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +24 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +26 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +28 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-58.1	-53.7	-48.7	-43.8	-38.5	-33.0	-26.9
100	-61.2	-55.6	-51.4	-46.8	-41.7	-36.2	-29.8
500	-66.4	-63.6	-59.3	-54.1	-49.4	-44.2	-38.6
1000	-58.5	-54.0	-49.5	-44.4	-38.9	-33.3	-29.1
2000	-58.3	-54.2	-49.8	-44.4	-38.9	-33.7	-29.8
3000	-58.5	-53.6	-48.5	-42.8	-36.9	-31.2	-27.2
4000	-57.3	-52.5	-47.4	-41.1	-34.4	-29.4	-26.8
5000	-65.1	-59.9	-54.3	-48.7	-41.4	-35.2	-33.0
6000	-71.5	-65.9	-60.2	-55.1	-50.9	-43.8	-37.8
7000	-72.9	-68.3	-61.0	-57.9	-49.7	-46.6	-48.6

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 100 mA @ Temperature = +25°C

FREQ	3RD Harmonic vs P_{OUT} P_{OUT} = +18 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +20 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +22 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +24 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +26 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +28 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-45.0	-40.7	-36.0	-31.1	-26.9	-24.6	-24.3
100	-48.3	-43.5	-38.6	-33.6	-28.7	-25.4	-24.0
500	-56.2	-51.3	-46.6	-41.6	-36.9	-32.4	-29.4
1000	-47.0	-42.1	-37.4	-33.1	-30.0	-28.4	-27.6
2000	-45.9	-41.3	-36.9	-33.2	-30.7	-29.3	-28.7
3000	-42.9	-37.9	-33.2	-29.4	-26.9	-25.3	-23.6
4000	-41.6	-36.2	-31.3	-28.1	-26.0	-24.7	-24.2
5000	-49.4	-43.9	-38.0	-33.9	-31.2	-29.4	-28.9
6000	-58.2	-52.9	-47.6	-41.9	-37.3	-34.6	-32.2
7000	-60.7	-56.1	-51.1	-47.0	-42.5	-41.9	-42.1

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Note: Units are in dBc.

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 400 mA @ Temperature = +25°C

FREQ	3RD Harmonic vs P_{OUT} P_{OUT} = +18 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +20 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +22 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +24 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +26 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +28 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-64.3	-62.2	-58.7	-55.5	-51.5	-47.3	-42.2
100	-68.0	-65.2	-60.1	-56.5	-52.9	-49.0	-44.5
500	-73.8	-70.7	-66.2	-64.2	-59.1	-55.1	-51.0
1000	-68.1	-64.4	-60.7	-56.9	-51.8	-47.1	-41.9
2000	-67.8	-64.7	-61.8	-56.4	-52.3	-47.4	-42.2
3000	-68.2	-64.4	-60.9	-55.5	-51.8	-46.5	-40.6
4000	-69.1	-63.2	-60.2	-55.4	-50.7	-45.2	-38.8
5000	-71.8	-67.2	-63.2	-60.0	-55.2	-50.7	-45.0
6000	-73.2	-72.6	-67.8	-61.6	-58.7	-54.7	-47.9
7000	-75.2	-72.1	-67.3	-63.4	-56.7	-55.4	-55.8

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 400 mA @ Temperature = -55°C

FREQ	3RD Harmonic vs P_{OUT} P_{OUT} = +18 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +20 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +22 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +24 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +26 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +28 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-66.4	-66.8	-64.1	-57.7	-51.9	-48.0	-42.5
100	-75.9	-68.4	-62.7	-59.0	-55.2	-50.2	-45.3
500	-74.7	-72.2	-70.4	-66.3	-60.6	-56.7	-51.8
1000	-70.3	-65.7	-61.1	-57.0	-52.7	-47.2	-41.1
2000	-70.0	-65.7	-62.1	-58.4	-53.6	-48.7	-42.7
3000	-72.6	-66.5	-65.5	-57.2	-53.1	-47.3	-40.4
4000	-68.3	-66.0	-62.4	-57.2	-52.1	-45.7	-38.2
5000	-76.3	-70.2	-67.1	-62.1	-56.5	-51.1	-43.5
6000	-77.9	-76.6	-68.1	-64.6	-58.8	-56.1	-50.0
7000	-78.3	-70.8	-62.7	-63.2	-57.7	-54.7	-52.3

TEST CONDITIONS: V_{DD} = 28V, I_{DD} = 400 mA @ Temperature = +95°C

FREQ	3RD Harmonic vs P_{OUT} P_{OUT} = +18 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +20 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +22 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +24 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +26 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +28 dBm	3RD Harmonic vs P_{OUT} P_{OUT} = +30 dBm
(MHz)	+18	+20	+22	+24	+26	+28	+30
10	-58.2	-56.8	-56.7	-53.7	-50.5	-46.1	-41.6
100	-66.0	-61.8	-57.7	-54.4	-50.7	-46.9	-42.9
500	-70.7	-69.5	-64.0	-61.4	-56.4	-53.2	-49.0
1000	-64.9	-61.6	-57.8	-54.5	-49.8	-45.8	-41.1
2000	-65.9	-62.3	-57.6	-54.5	-50.1	-45.8	-40.9
3000	-65.0	-61.7	-56.5	-53.8	-50.0	-44.7	-39.3
4000	-64.9	-61.5	-59.0	-53.4	-49.0	-44.0	-38.5
5000	-69.5	-64.4	-63.6	-57.9	-53.4	-49.4	-47.2
6000	-71.5	-69.6	-63.0	-60.3	-57.2	-53.0	-49.4
7000	-70.0	-70.3	-64.5	-59.3	-56.7	-54.3	-58.3

Typical Performance Data

NOTE: Use PDF Bookmarks to view DATA at required conditions

Definitions:
Input Return Loss = S11 (dB)
Gain(Power Gain) = S21 (dB)
Isolation = S12 (dB)
Output Return Loss = S22 (dB)

TEST CONDITIONS: V_{DD} = +28 V, I_{DD} = 400 mA, V_G = -2 V, I_G = 0.01 mA

FREQ	Gain	Isolation	Input Return Loss	Output Return Loss	Stability		P_{SAT} Output
(MHz)	(dB)	(dB)	(dB)	(dB)	K	Measure	(dBm)
10	-2.7	-67.8	-11.1	-1.3	399.6	0.3	18.8
30	6.1	-61.4	-11.3	-1.0	206.5	0.2	27.0
100	8.4	-55.0	-11.6	-0.6	13.4	0.1	29.5
200	15.4	-55.6	-11.6	-2.3	19.5	0.4	35.9
300	19.7	-45.9	-8.3	-5.6	6.2	0.8	37.9
400	19.1	-44.3	-11.3	-9.1	7.3	0.9	38.5
500	20.4	-41.1	-10.8	-15.4	4.8	1.1	38.9
600	20.8	-39.2	-9.8	-27.8	3.8	1.1	39.1
700	20.5	-38.4	-8.9	-21.6	3.5	1.1	39.2
800	19.4	-38.2	-8.6	-16.8	3.8	1.1	39.0
900	18.5	-38.1	-8.9	-14.0	4.1	1.1	39.1
1000	18.0	-37.5	-9.7	-11.1	4.0	1.0	39.3
1100	18.0	-36.8	-10.9	-10.2	3.7	1.0	39.3
1200	18.1	-36.1	-12.1	-9.0	3.3	0.9	39.2
1300	18.3	-35.2	-13.5	-8.1	2.9	0.9	39.1
1400	18.4	-34.6	-14.5	-7.5	2.6	0.8	39.0
1500	18.4	-33.9	-15.4	-7.1	2.4	0.8	39.0
1600	18.4	-33.6	-15.8	-6.8	2.2	0.8	39.0
1700	18.4	-33.1	-15.9	-6.6	2.1	0.8	38.9
1800	18.3	-32.7	-15.6	-6.5	2.0	0.8	39.0
1900	18.2	-32.4	-15.1	-6.5	2.0	0.8	39.0
2000	18.1	-32.0	-14.5	-6.6	1.9	0.8	39.0
2100	18.0	-31.8	-14.0	-6.8	1.9	0.8	39.0
2200	18.0	-31.5	-13.5	-7.0	1.8	0.8	39.1
2300	17.9	-31.2	-13.0	-7.3	1.8	0.8	39.1
2400	17.8	-30.9	-12.7	-7.7	1.8	0.9	39.0
2500	17.8	-30.7	-12.5	-8.2	1.8	0.9	39.0
2600	17.7	-30.4	-12.4	-8.8	1.8	0.9	38.9
2700	17.7	-30.1	-12.4	-9.5	1.8	0.9	38.8
2800	17.7	-29.8	-12.5	-10.3	1.8	0.9	38.7
2900	17.6	-29.6	-12.8	-11.2	1.8	0.9	38.6
3000	17.6	-29.3	-13.3	-12.1	1.8	0.9	38.6
3100	17.6	-29.1	-13.8	-12.9	1.9	0.9	38.6
3200	17.5	-28.8	-14.6	-13.5	1.9	0.9	38.4
3300	17.5	-28.6	-15.7	-13.8	1.8	0.9	38.2
3400	17.4	-28.4	-17.0	-13.7	1.8	0.9	38.3
3500	17.3	-28.3	-18.6	-13.4	1.8	0.9	38.4
3600	17.2	-28.1	-20.8	-12.8	1.8	0.9	38.4
3700	17.2	-28.0	-23.4	-12.2	1.8	0.9	38.5
3800	17.1	-27.8	-25.8	-11.6	1.7	0.9	38.6
3900	17.0	-27.8	-25.3	-11.1	1.7	0.9	38.7
4000	16.9	-27.6	-22.8	-10.7	1.7	0.8	38.7
4500	16.4	-27.2	-14.9	-9.7	1.7	0.8	38.5
5000	16.0	-26.8	-12.5	-10.6	1.7	0.8	38.8
5500	15.9	-26.1	-12.8	-13.1	1.6	0.9	39.0
6000	15.7	-25.5	-15.3	-14.4	1.6	0.9	38.4
6500	14.6	-26.1	-11.6	-14.5	1.8	1.0	38.2
7000	12.4	-28.0	-7.1	-14.1	2.4	1.1	37.4

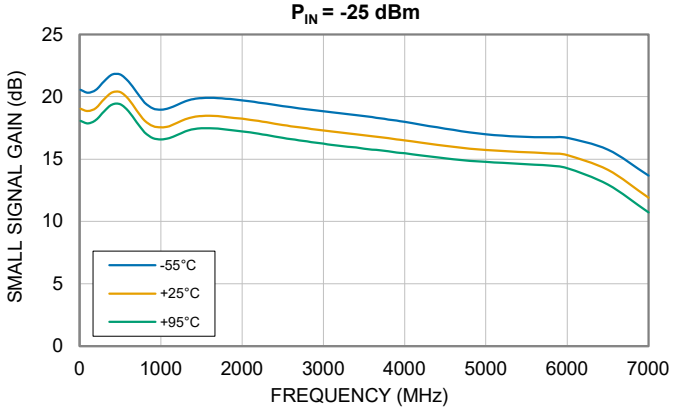
FREQ	P_{OUT} at Fixed P_{IN}								
(MHz)	+5	+10	+15	+20	+22	+24	+26	+28	+30
10	2.0	6.9	11.5	15.1	16.3	17.5	18.8	20.2	21.4
30	10.7	15.6	20.2	23.6	24.7	25.9	27.0	28.1	29.1
100	13.1	18.0	22.5	25.7	26.8	27.9	29.1	30.1	30.8
500	25.2	30.2	34.4	37.2	37.9	38.4	38.6	38.8	39.0
1000	22.7	27.8	32.6	36.3	37.5	38.3	38.8	39.2	39.3
2000	23.0	28.0	32.3	35.7	36.9	37.9	38.6	38.9	39.1
4000	21.5	26.4	30.9	34.2	35.3	36.4	37.4	38.1	38.5
6000	20.2	25.2	29.9	33.7	35.0	36.2	37.2	37.9	38.4
7000	17.1	22.2	27.3	31.9	33.4	34.8	35.9	36.7	37.4

FREQ	Gain at Fixed P_{IN}								
(MHz)	+5	+10	+15	+20	+22	+24	+26	+28	+30
10	-3.0	-3.1	-3.5	-4.9	-5.7	-6.5	-7.2	-7.8	-8.6
30	5.7	5.6	5.2	3.6	2.7	1.9	1.0	0.1	-0.9
100	8.1	8.0	7.5	5.7	4.8	3.9	3.1	2.1	0.8
500	20.2	20.2	19.4	17.2	15.9	14.4	12.6	10.8	9.0
1000	17.7	17.8	17.6	16.3	15.5	14.3	12.8	11.2	9.3
2000	18.0	18.0	17.3	15.7	14.9	13.9	12.6	10.9	9.1
4000	16.5	16.4	15.9	14.2	13.3	12.4	11.4	10.1	8.5
6000	15.2	15.2	14.9	13.7	13.0	12.2	11.2	9.9	8.4
7000	12.1	12.2	12.3	11.9	11.4	10.8	9.9	8.7	7.4

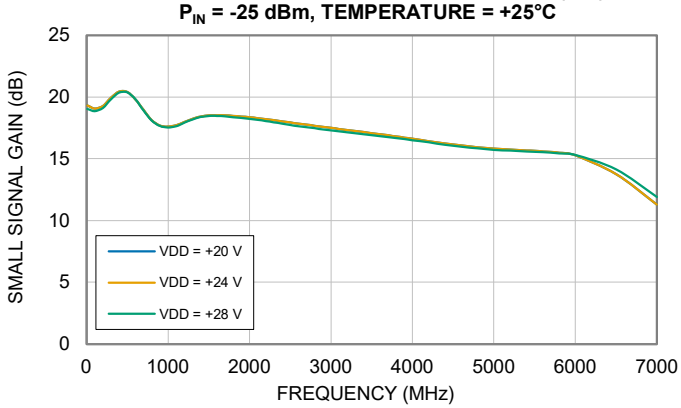
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

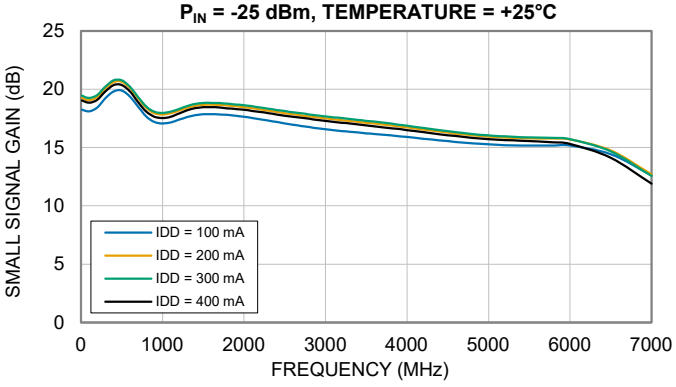
SMALL SIGNAL GAIN vs. TEMPERATURE
P_{IN} = -25 dBm



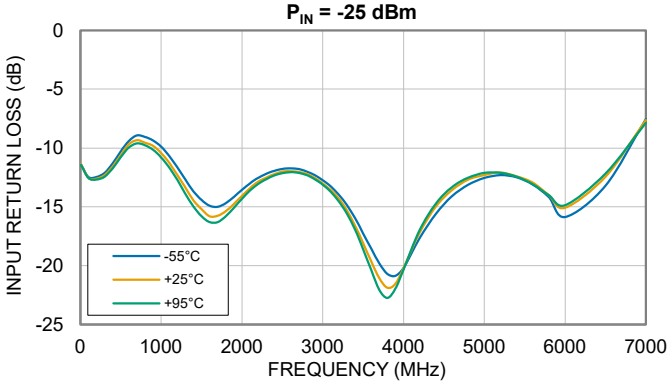
SMALL SIGNAL GAIN vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



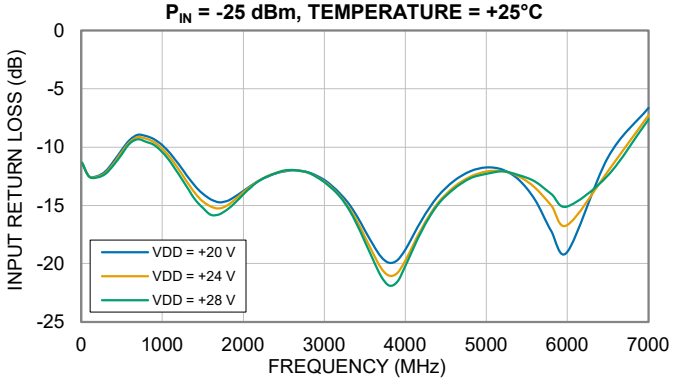
SMALL SIGNAL GAIN vs. DEVICE CURRENT (I_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



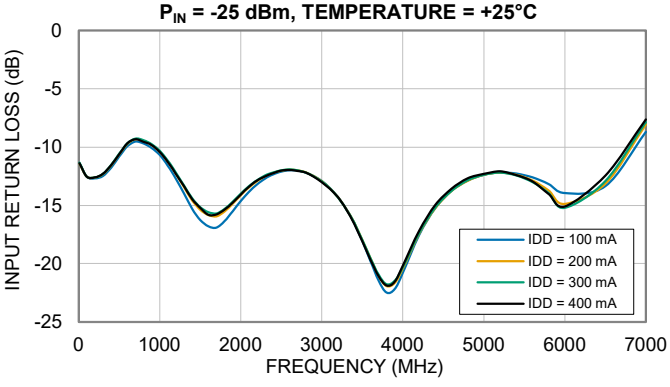
INPUT RETURN LOSS vs. TEMPERATURE
P_{IN} = -25 dBm



INPUT RETURN LOSS vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



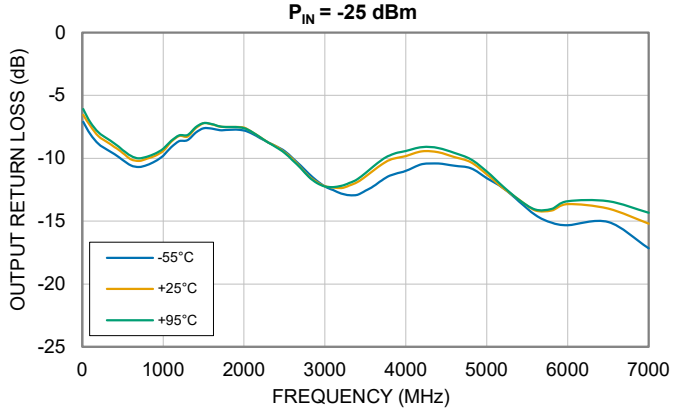
INPUT RETURN LOSS vs. DEVICE CURRENT (I_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



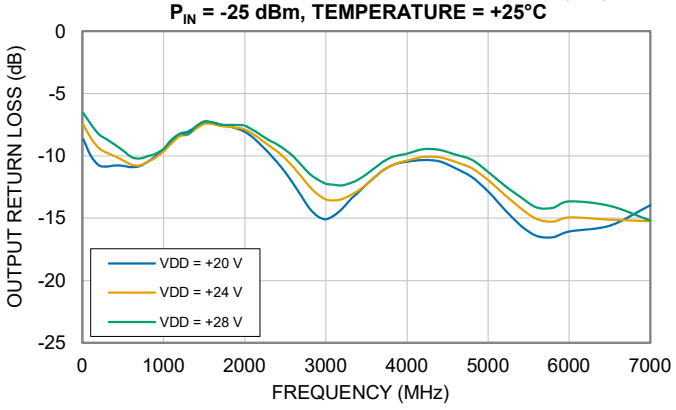
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

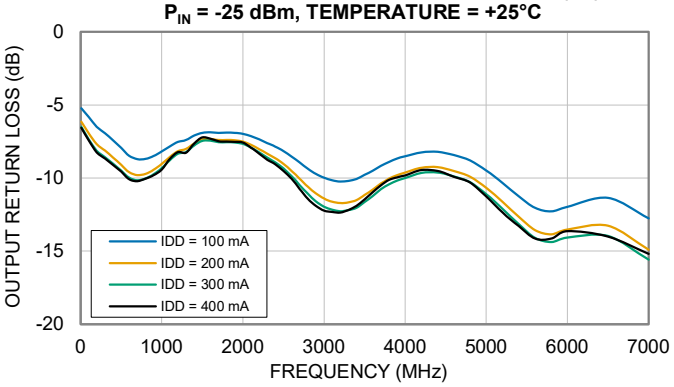
OUTPUT RETURN LOSS vs. TEMPERATURE
P_{IN} = -25 dBm



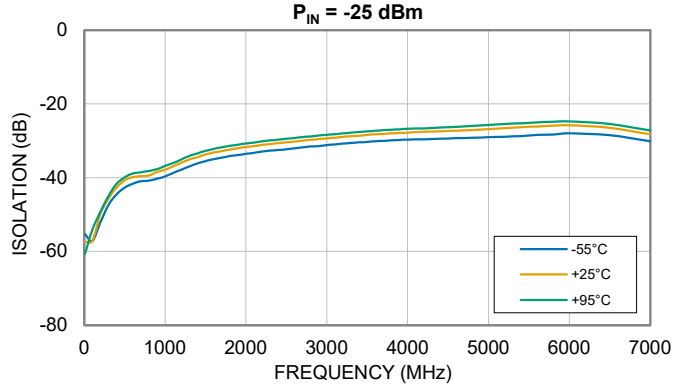
OUTPUT RETURN LOSS vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



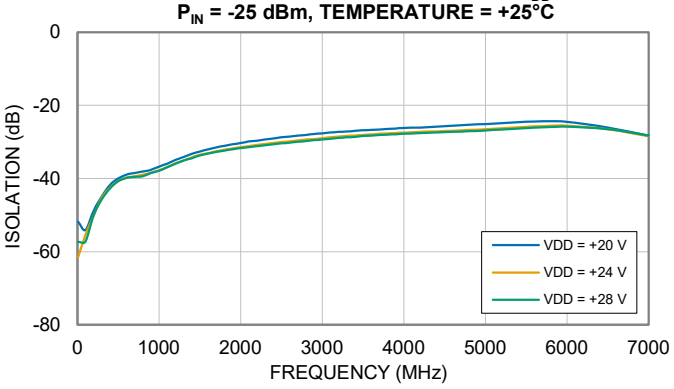
OUTPUT RETURN LOSS vs. DEVICE CURRENT (I_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



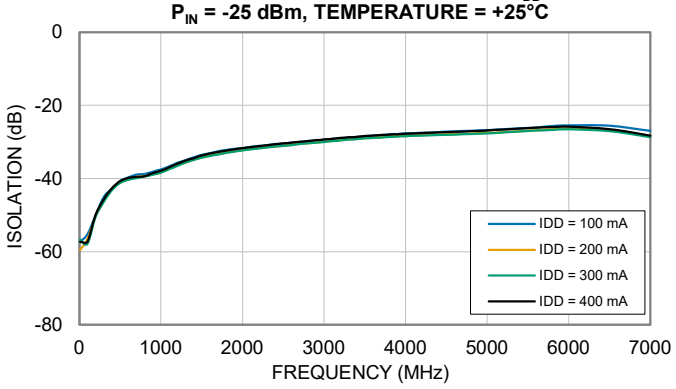
ISOLATION vs. TEMPERATURE
P_{IN} = -25 dBm



ISOLATION vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



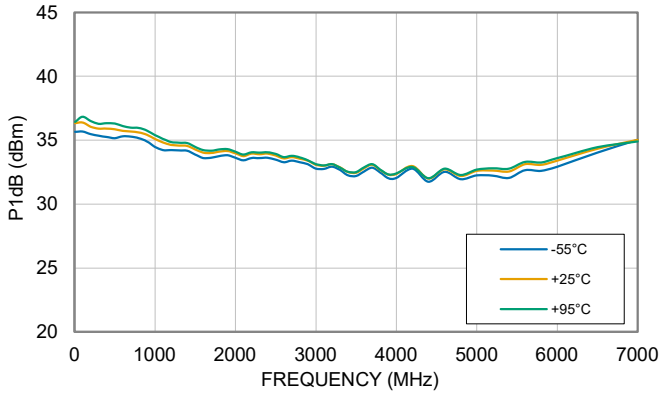
ISOLATION vs. DEVICE CURRENT (I_{DD})
P_{IN} = -25 dBm, TEMPERATURE = +25°C



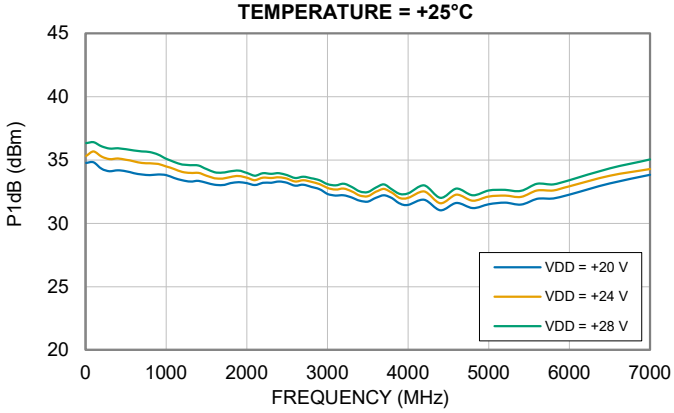
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

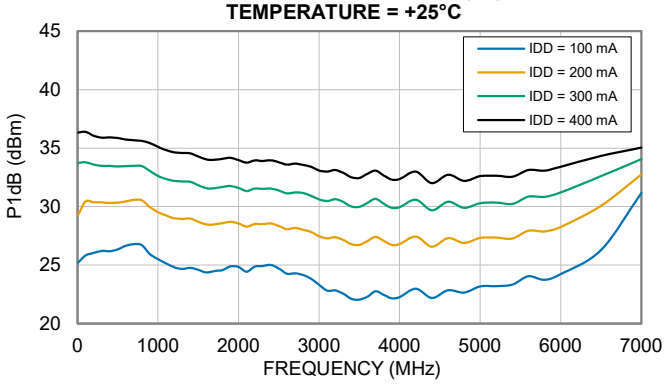
P1dB vs. TEMPERATURE



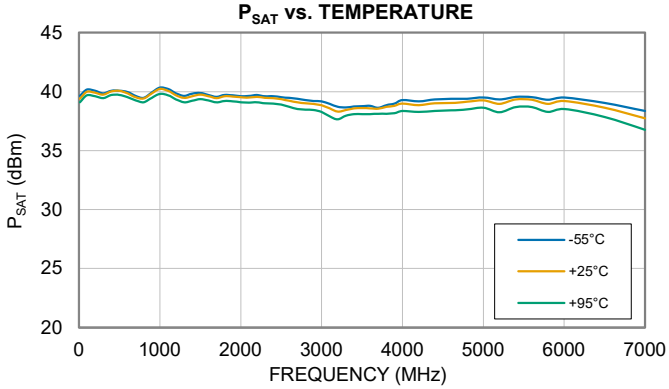
P1dB vs. DEVICE VOLTAGE (V_{DD})
TEMPERATURE = +25°C



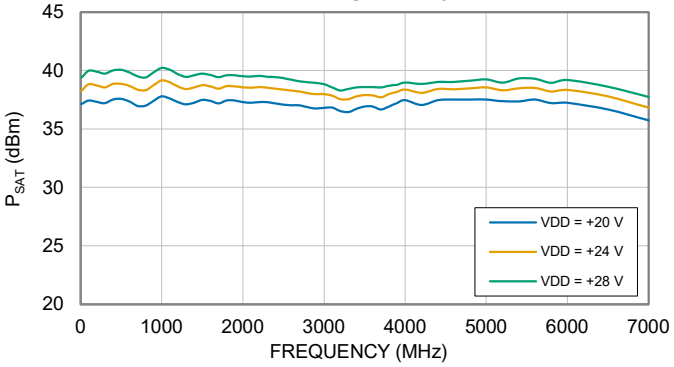
P1dB vs. DEVICE CURRENT (I_{DD})
TEMPERATURE = +25°C



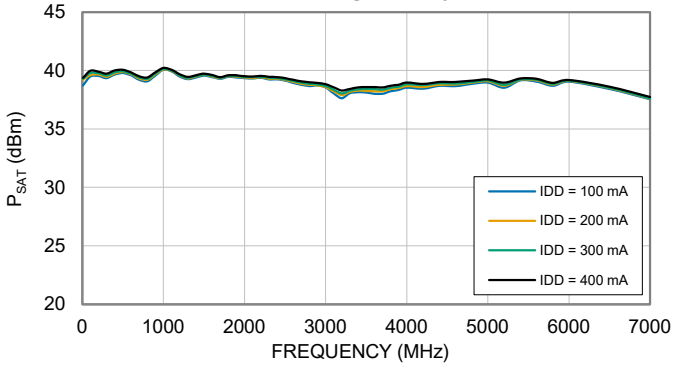
P_{SAT} vs. TEMPERATURE



P_{SAT} vs. DEVICE VOLTAGE (V_{DD})
TEMPERATURE = +25°C



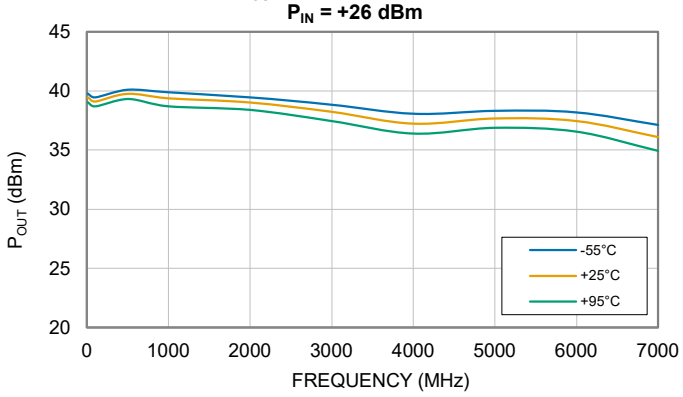
P_{SAT} vs. DEVICE CURRENT (I_{DD})
TEMPERATURE = +25°C



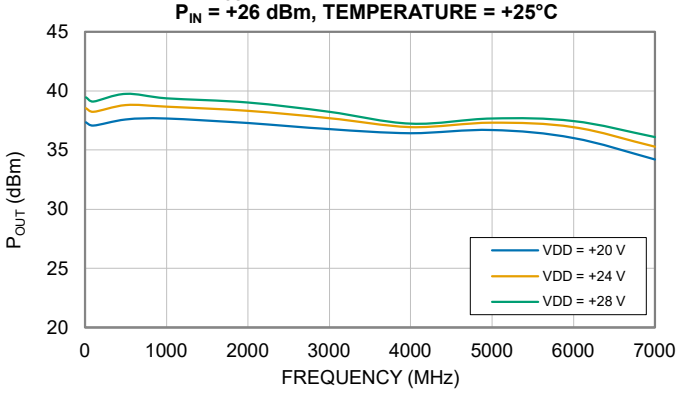
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

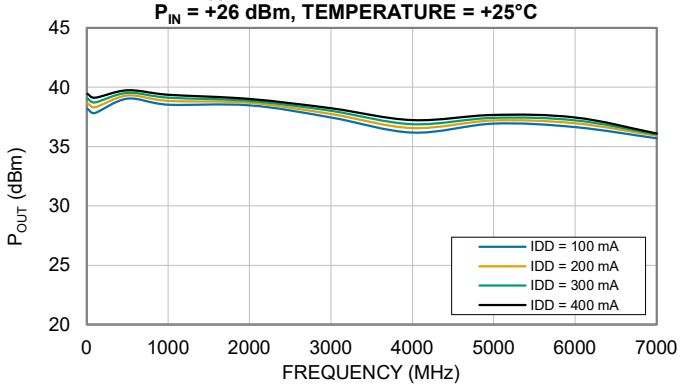
P_{OUT} vs. TEMPERATURE
P_{IN} = +26 dBm



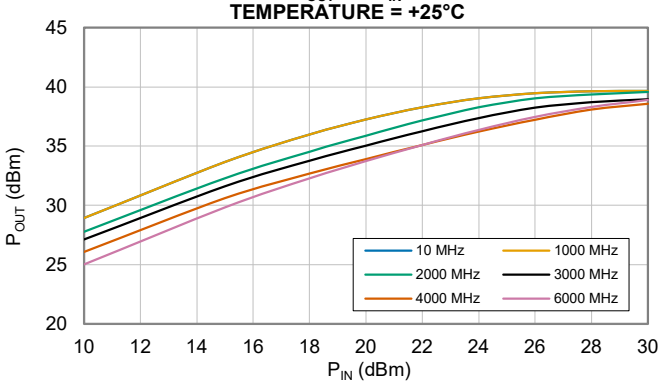
P_{OUT} vs. DEVICE VOLTAGE (V_{DD})
P_{IN} = +26 dBm, TEMPERATURE = +25°C



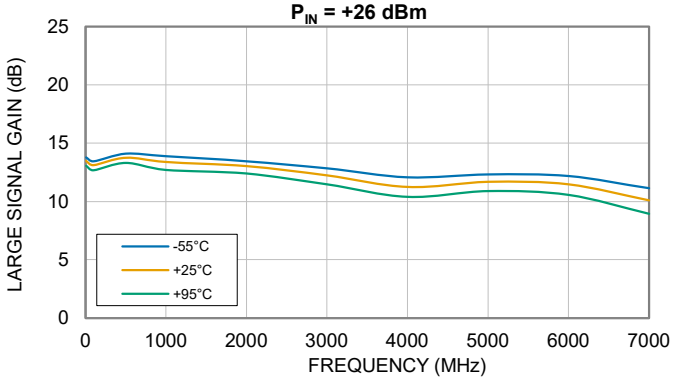
P_{OUT} vs. DEVICE CURRENT (I_{DD})
P_{IN} = +26 dBm, TEMPERATURE = +25°C



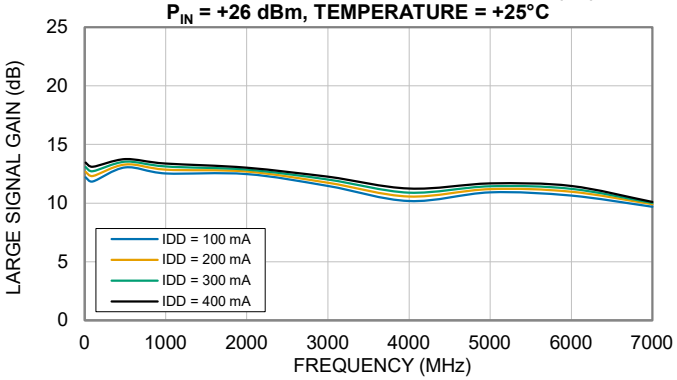
P_{OUT} vs. P_{IN}
TEMPERATURE = +25°C



LARGE SIGNAL GAIN vs. TEMPERATURE
P_{IN} = +26 dBm



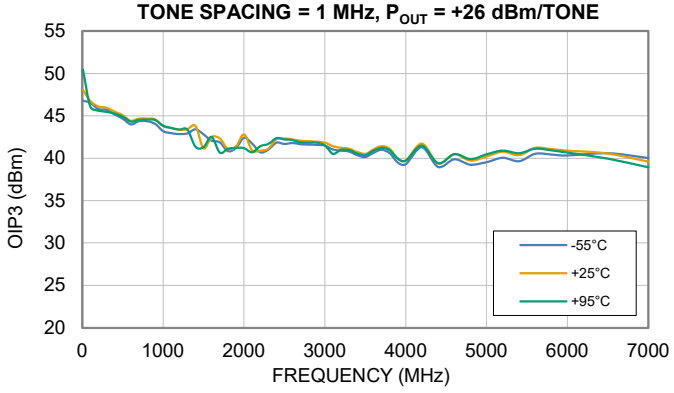
LARGE SIGNAL GAIN vs. DEVICE CURRENT (I_{DD})
P_{IN} = +26 dBm, TEMPERATURE = +25°C



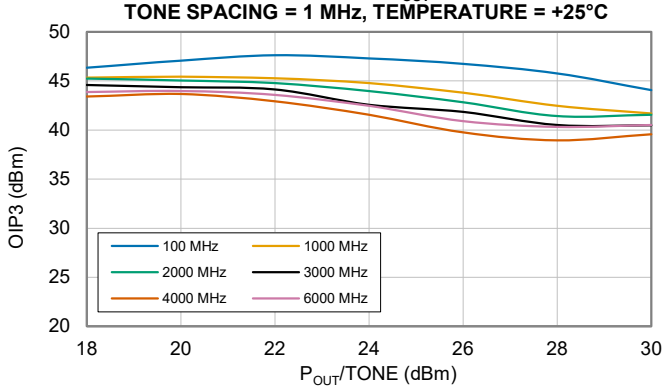
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

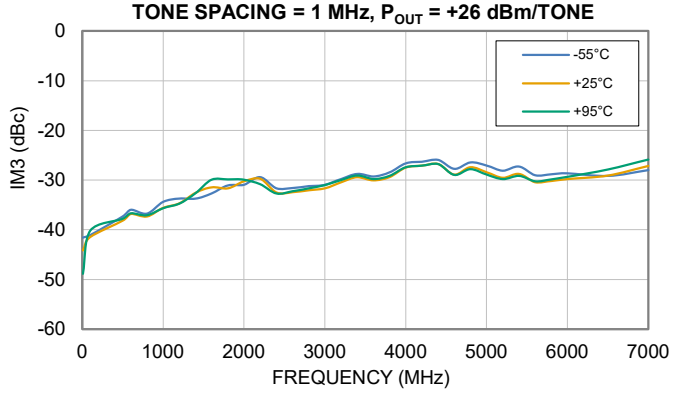
OIP3 vs. TEMPERATURE
TONE SPACING = 1 MHz, P_{OUT} = +26 dBm/TONE



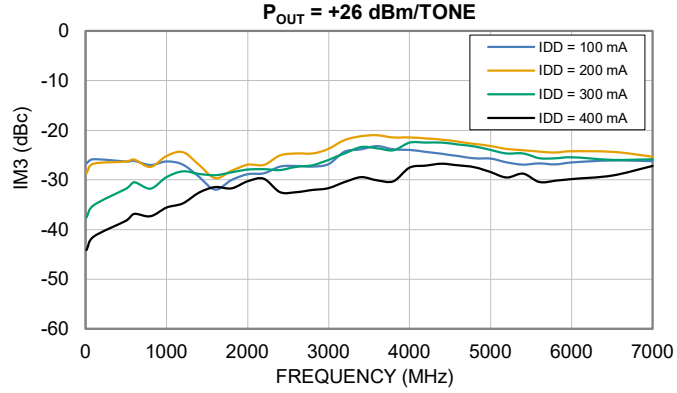
OIP3 vs. P_{OUT}
TONE SPACING = 1 MHz, TEMPERATURE = +25°C



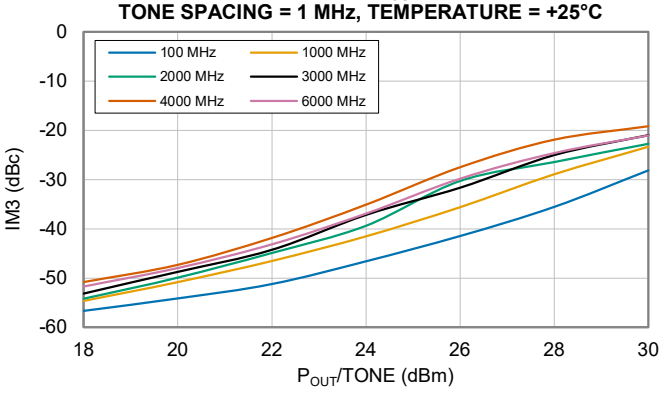
IM3 vs. TEMPERATURE
TONE SPACING = 1 MHz, P_{OUT} = +26 dBm/TONE



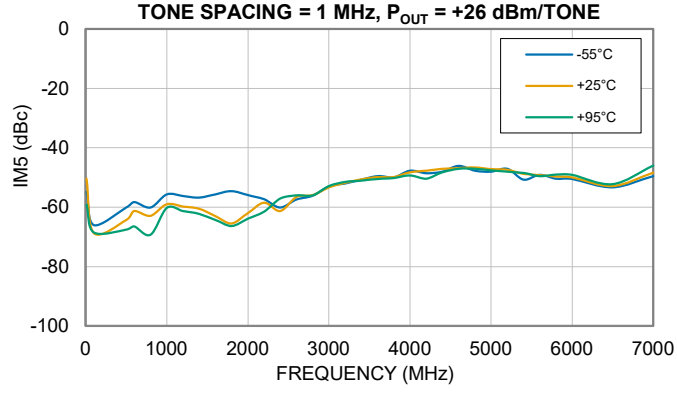
IM3 vs. DEVICE CURRENT (I_{DD})
TONE SPACING = 1 MHz, TEMPERATURE = +25°C,
P_{OUT} = +26 dBm/TONE



IM3 vs. P_{OUT}
TONE SPACING = 1 MHz, TEMPERATURE = +25°C



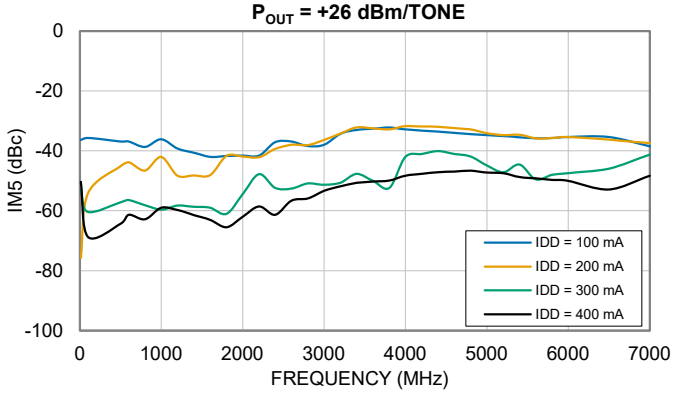
IM5 vs. TEMPERATURE
TONE SPACING = 1 MHz, P_{OUT} = +26 dBm/TONE



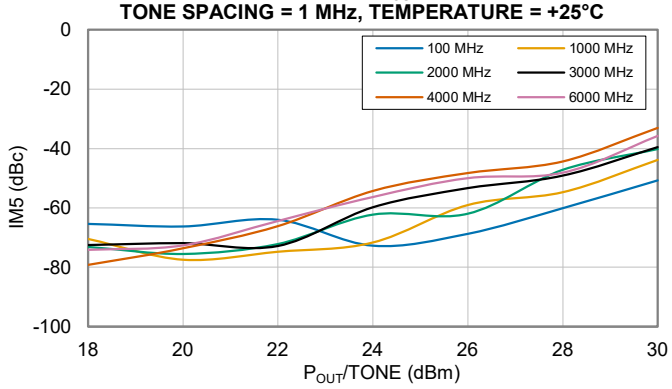
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

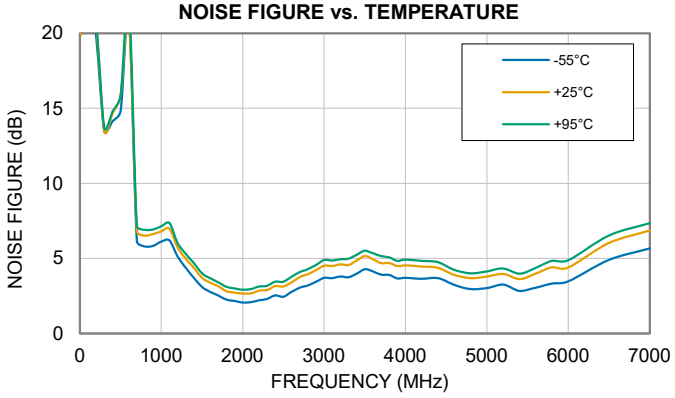
IM5 vs. DEVICE CURRENT (I_{DD})
TONE SPACING = 1 MHz, TEMPERATURE = +25°C,
P_{OUT} = +26 dBm/TONE



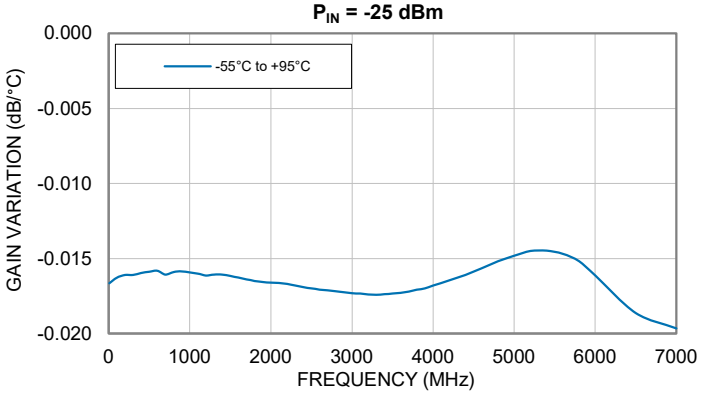
IM5 vs. P_{OUT}
TONE SPACING = 1 MHz, TEMPERATURE = +25°C



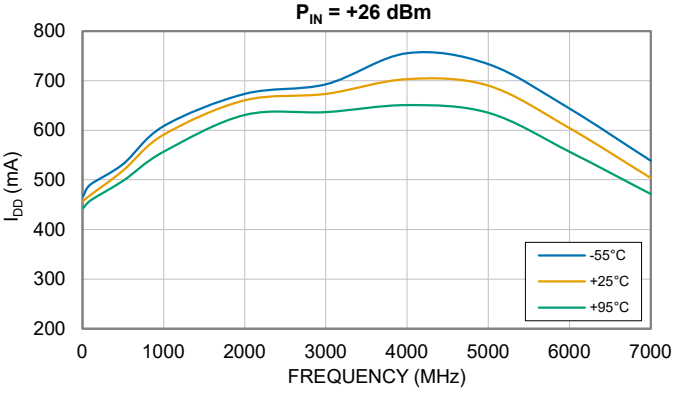
NOISE FIGURE vs. TEMPERATURE



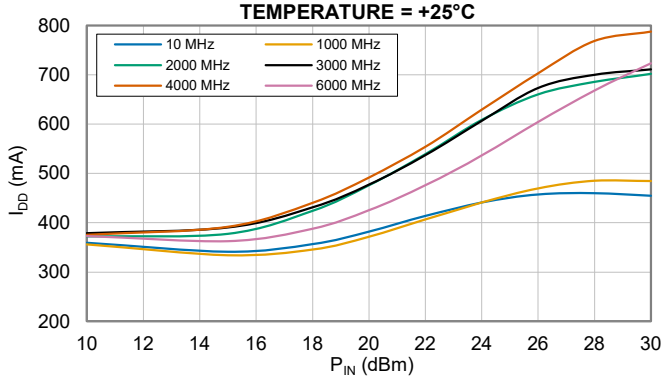
GAIN VARIATION vs. TEMPERATURE
P_{IN} = -25 dBm



I_{DD} vs. TEMPERATURE
P_{IN} = +26 dBm

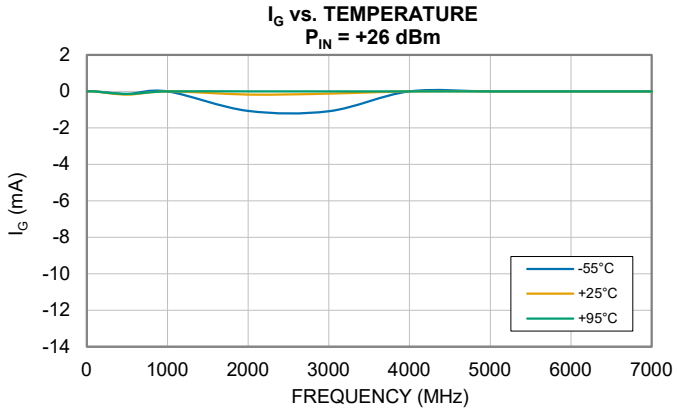


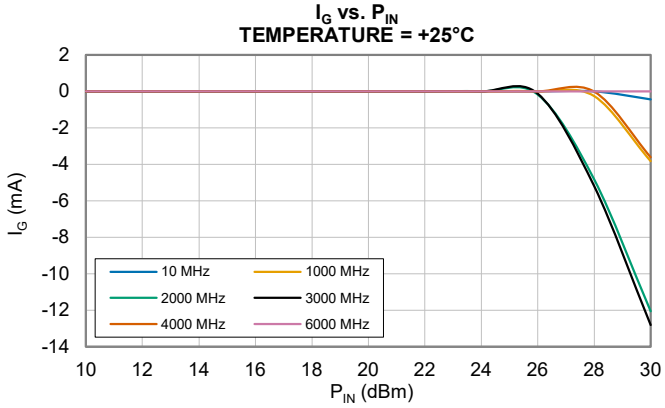
I_{DD} vs. P_{IN}
TEMPERATURE = +25°C

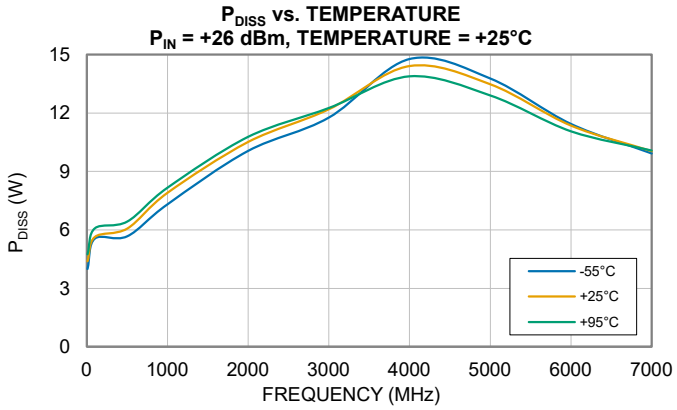


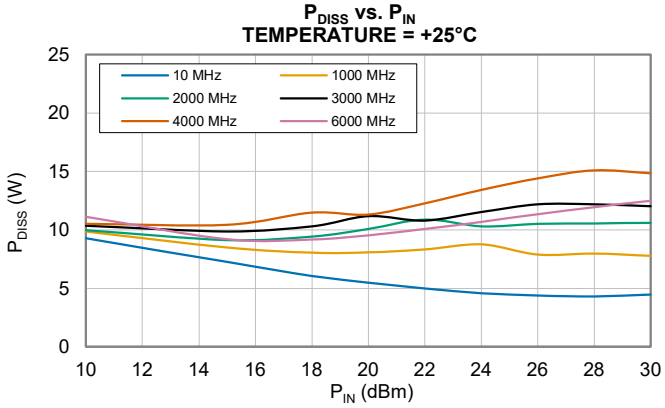
Typical Performance Curves

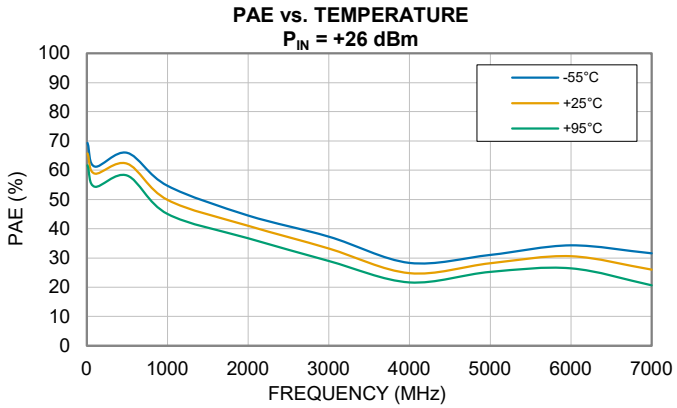
Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

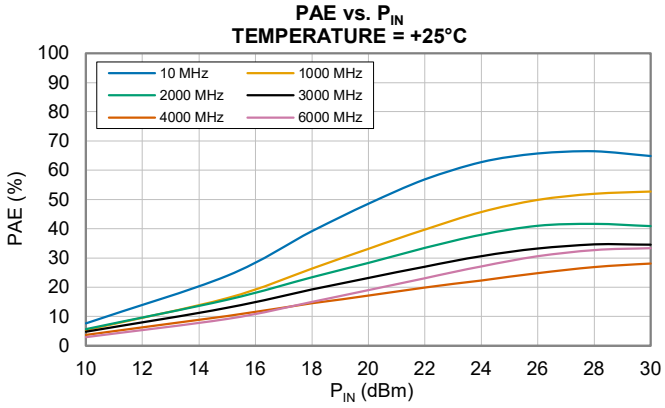








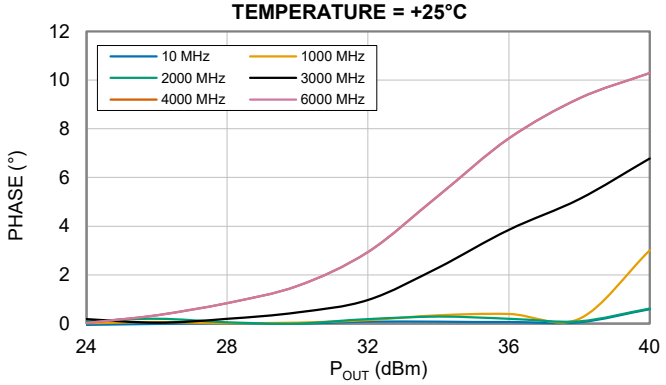




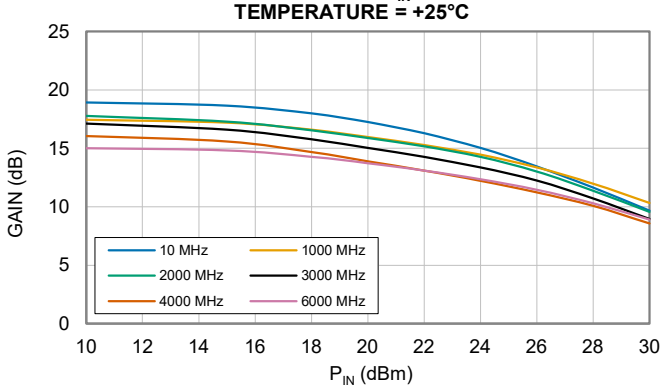
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

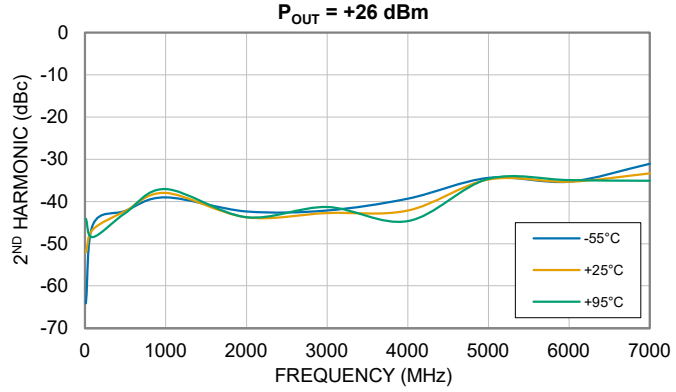
AM-PM
TEMPERATURE = +25°C



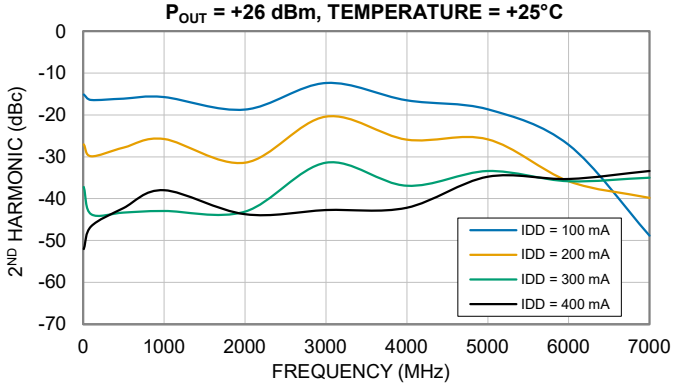
GAIN vs. P_{IN}
TEMPERATURE = +25°C



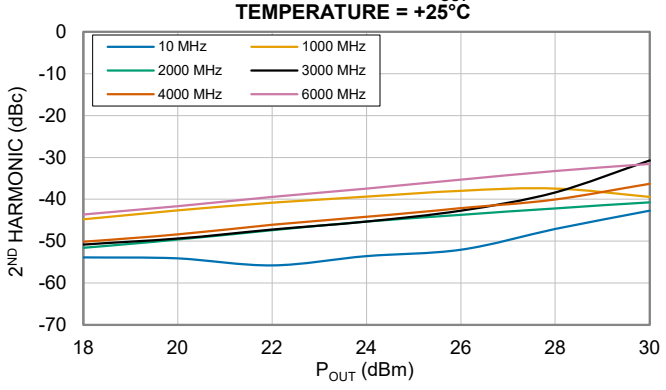
2ND HARMONIC vs. TEMPERATURE
P_{OUT} = +26 dBm



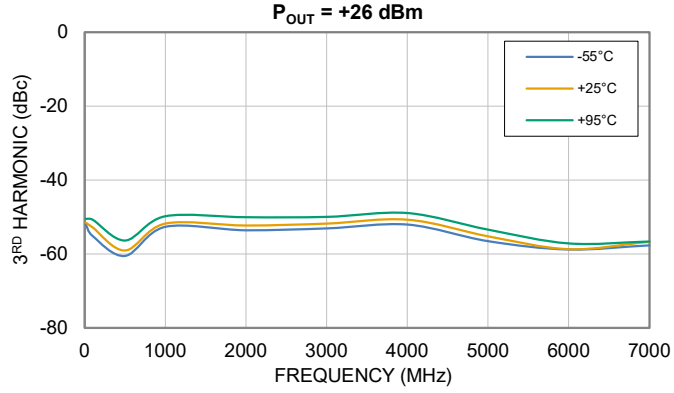
2ND HARMONIC vs. DEVICE CURRENT (I_{DD})
P_{OUT} = +26 dBm, TEMPERATURE = +25°C



2ND HARMONIC vs. P_{OUT}
TEMPERATURE = +25°C



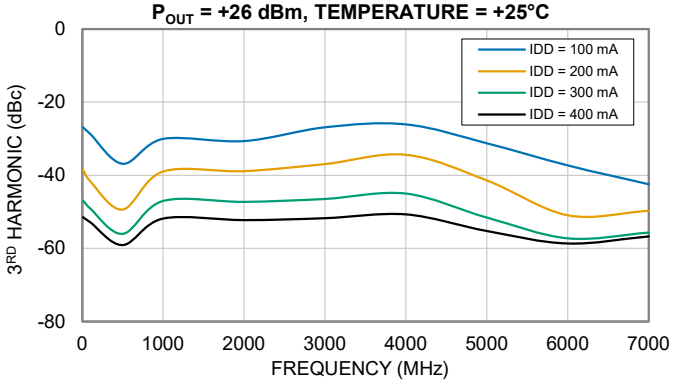
3RD HARMONIC vs. TEMPERATURE
P_{OUT} = +26 dBm



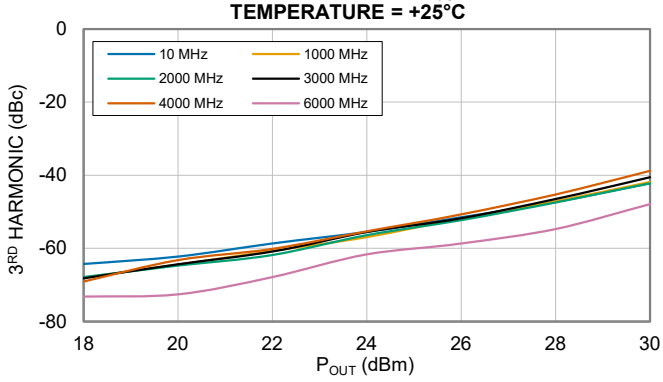
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ with external bias-T (Figure 2). All data taken at nominal condition of V_{DD} = +28 V and I_{DD} = 400 mA unless noted otherwise. V_G was adjusted at each voltage and temperature level to achieve I_{DD} = 400 mA.

3RD HARMONIC vs. DEVICE CURRENT (I_{DD})
P_{OUT} = +26 dBm, TEMPERATURE = +25°C



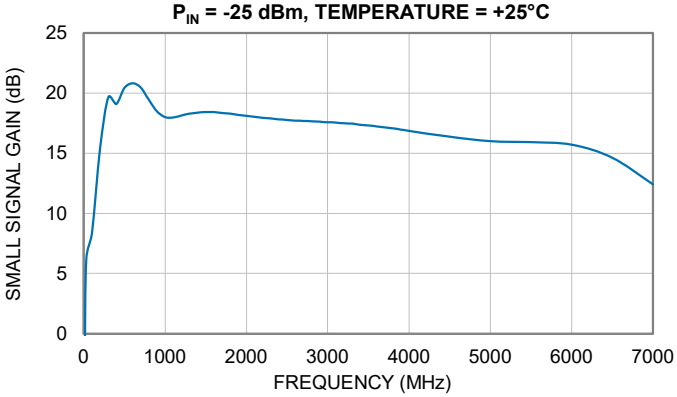
3RD HARMONIC vs. P_{OUT}
TEMPERATURE = +25°C



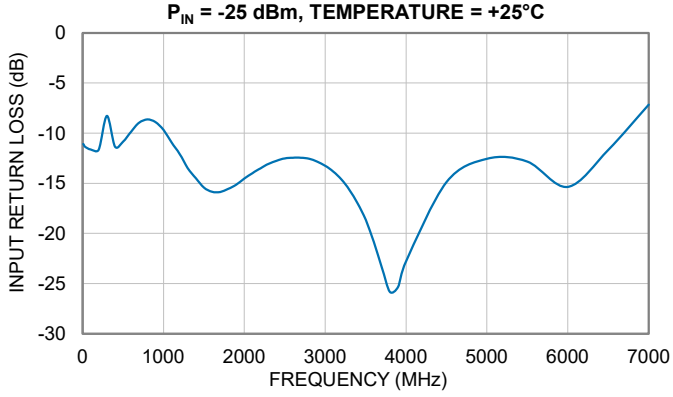
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ (Figure 3). All data taken at nominal condition of V_{DD} = +28 V, I_{DD} = 400 mA, and Temperature = +25°C unless noted otherwise. V_G was adjusted to achieve I_{DD} = 400 mA.

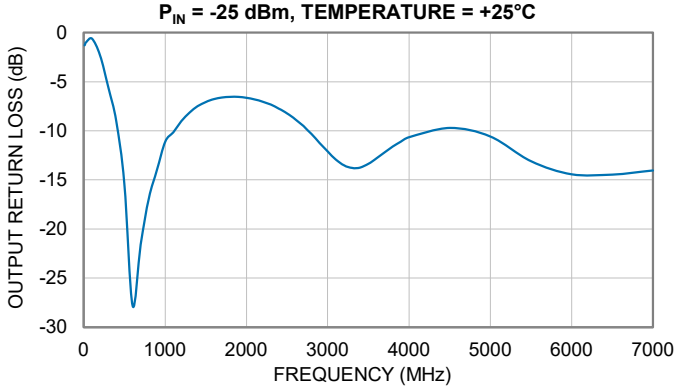
SMALL SIGNAL GAIN vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



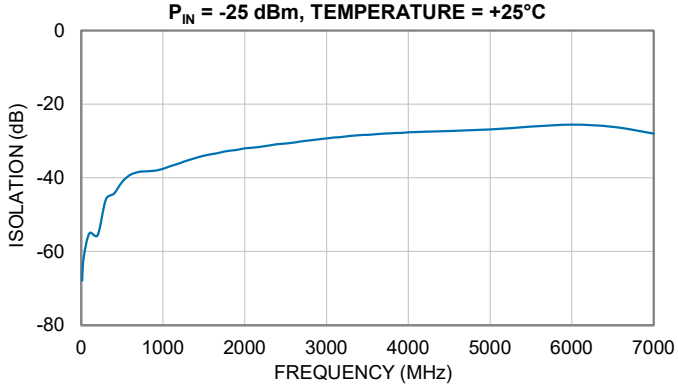
INPUT RETURN LOSS vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



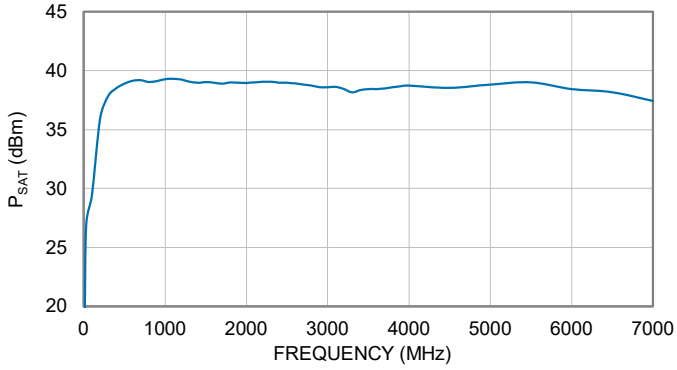
OUTPUT RETURN LOSS vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



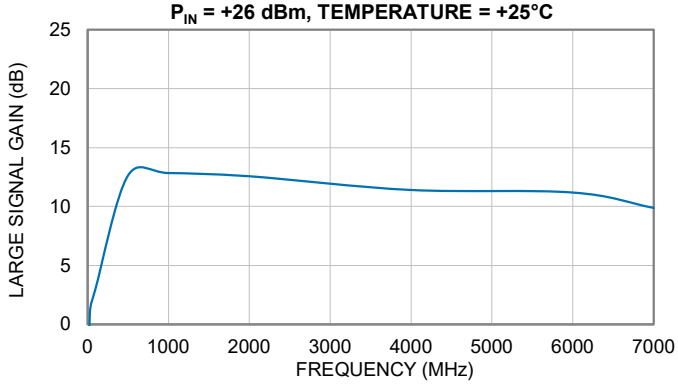
ISOLATION vs. FREQUENCY
P_{IN} = -25 dBm, TEMPERATURE = +25°C



P_{SAT} vs. FREQUENCY
TEMPERATURE = +25°C



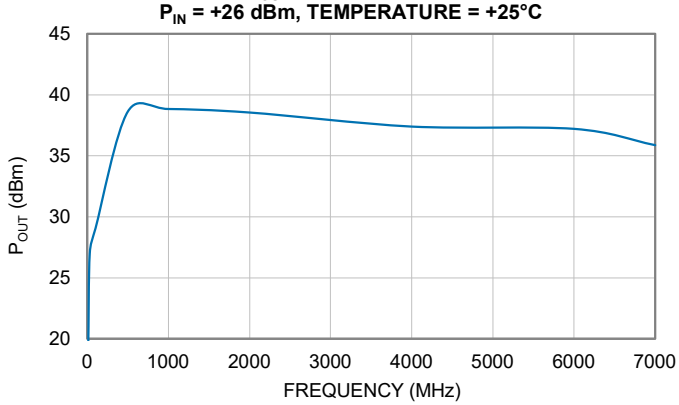
LARGE SIGNAL GAIN vs FREQUENCY
P_{IN} = +26 dBm, TEMPERATURE = +25°C



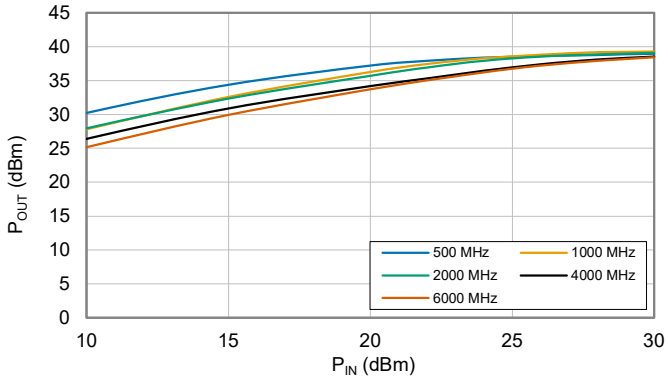
Typical Performance Curves

Note: The following data was taken on Mini-Circuits Characterization Test Board TB-GNA-63-5WCX+ (Figure 3). All data taken at nominal condition of V_{DD} = +28 V, I_{DD} = 400 mA, and Temperature = +25°C unless noted otherwise. V_G was adjusted to achieve I_{DD} = 400 mA.

P_{OUT} vs. FREQUENCY
P_{IN} = +26 dBm, TEMPERATURE = +25°C



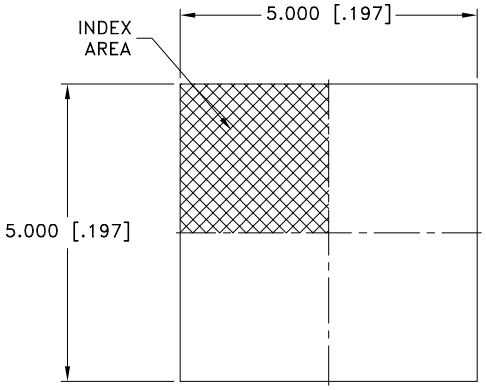
P_{OUT} vs. P_{IN}
TEMPERATURE = +25°C



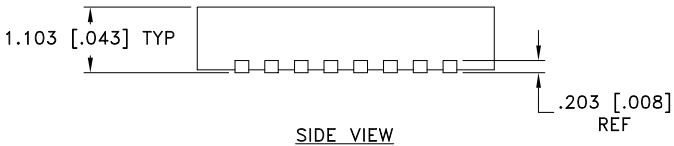
Case Style DG

Outline Dimensions

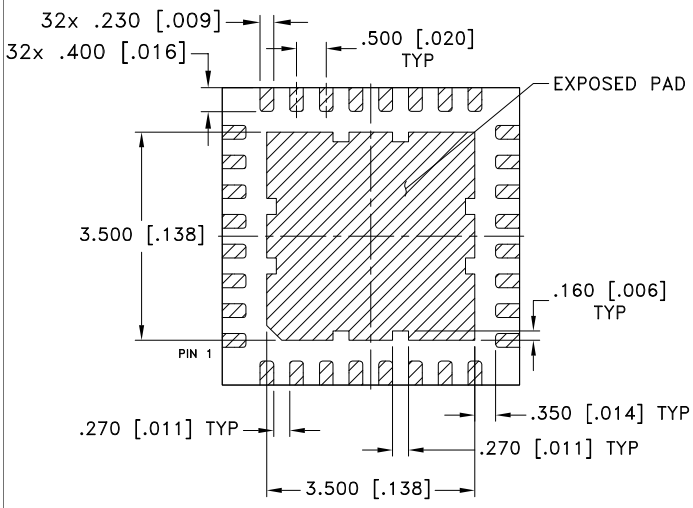
DG1677-8



TOP VIEW

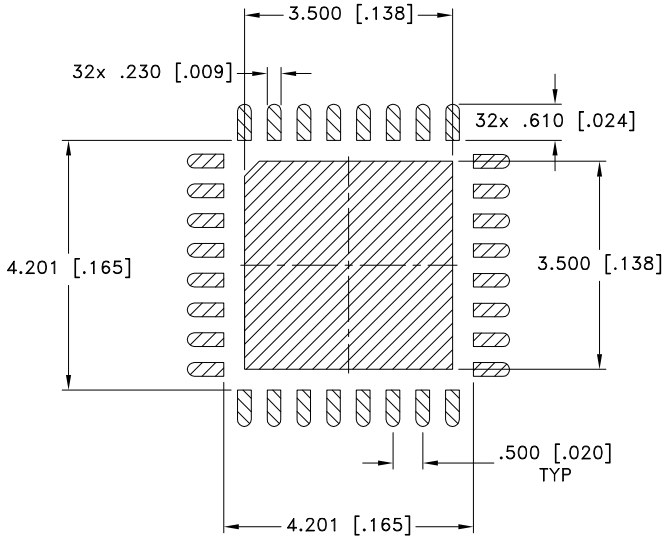


SIDE VIEW



BOTTOM VIEW

PCB Land Pattern



Suggested Layout,
Tolerance to be within ±0.050[0.002]

NOTES:

1. ▨ DENOTES METALLIZATION

Weight: .056 grams

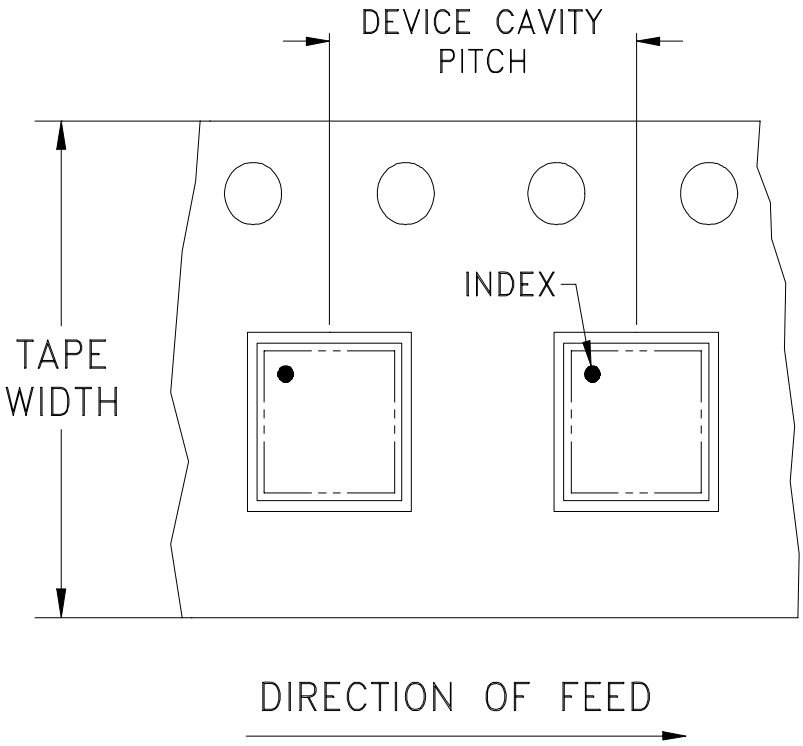
Dimensions are in mm [inches]. Tolerances: 2 Pl.±0.254[0.01]; 3 Pl.±.0.127[0.005] mm[Inches]

Notes:

1. Case material: Plastic.
2. Termination finish: PPF (NiPdAu Plating 0.5 µm/0.02µm/0.05µm)

Tape & Reel Packaging TR-F102

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel	
12	8	7	Small quantity standards (see note)	20
				50
				100
				200
				500
		13	Standard	1000

Note: Please Consult individual model data sheet to determine device per reel availability

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

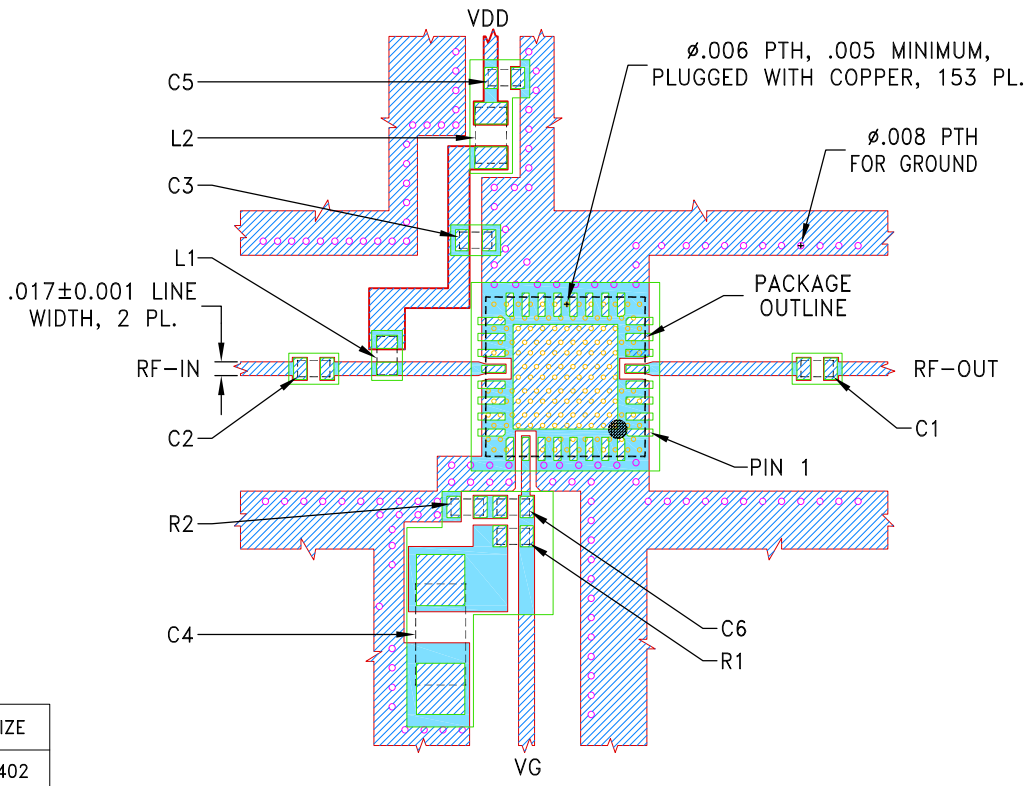
Go to: www.minicircuits.com/pages/pdfs/tape.pdf

Mini-Circuits®
INTERNET http://www.minicircuits.com
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661
Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010
Mini-Circuits ISO 9001 & ISO 14001 Certified

THIRD ANGLE PROJECTION

REVISIONS					
REV	ECN No.	DESCRIPTION	DATE	DR	AUTH
OR	ECO-029785	NEW RELEASE	06/09/26	TP	IL

SUGGESTED MOUNTING CONFIGURATION FOR DG1677-8 CASE STYLE



COMPONENT	SIZE
CI,C2,C3,C5,C6	0402
C4	1206
L1	0402
L2	0603
R1,R2	0402

NOTES:

1. LINE WIDTH IS SHOWN FOR ROGERS RO4003C LoPro FOIL, DIELECTRIC THICKNESS: .0087±.001"; COPPER: 1 OZ. EACH SIDE. FOR OTHER MATERIALS LINE WIDTH MAY NEED TO BE MODIFIED.
2. CHIP COMPONENT FOOT PRINTS SHOWN FOR REFERENCE, FOR COMPONENT VALUES REFER TO TB-GNA-63-5W+.
3. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

UNLESS OTHERWISE SPECIFIED		INITIALS	DATE
DIMENSIONS ARE IN INCHES	DRAWN	TP	06/09/26
TOLERANCES ON:	CHECKED	NP	06/09/26
2 PL DECIMALS ±	APPROVED	IL	06/09/26
3 PL DECIMALS ± .005			
ANGLES ±			
FRACTIONS ±			

ASHEETA1.DWG REV:A DATE:01/12/95

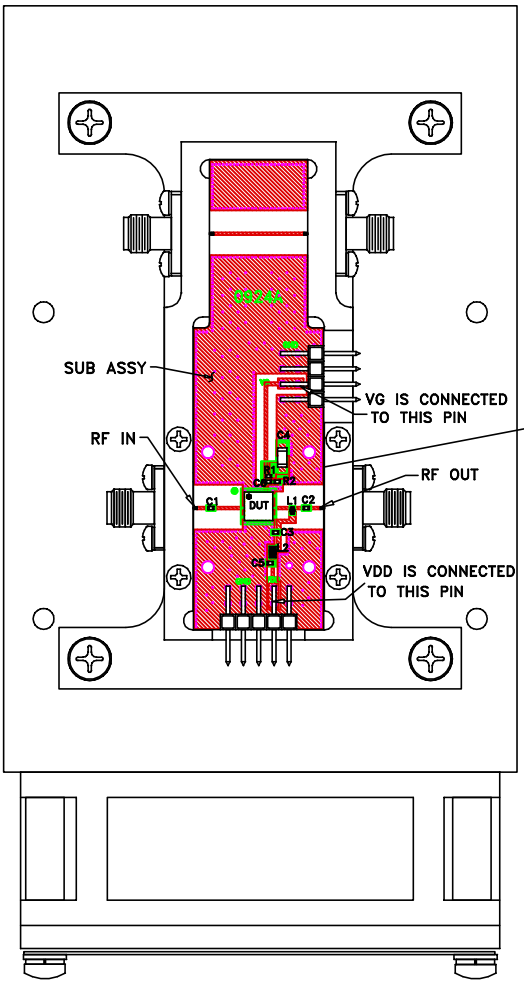
Mini-Circuits® 13 Neptune Avenue Brooklyn NY 11235

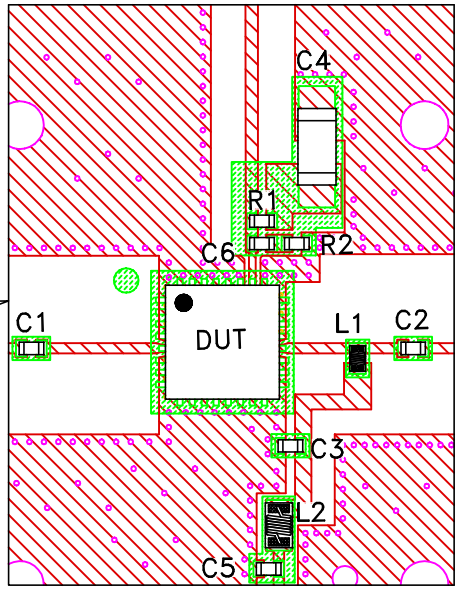
PL, DG1677-8, TB-GNA-63-5WC+

SIZE	CODE IDENT	DRAWING NO:	REV:
A	15542	98-PL-859	OR

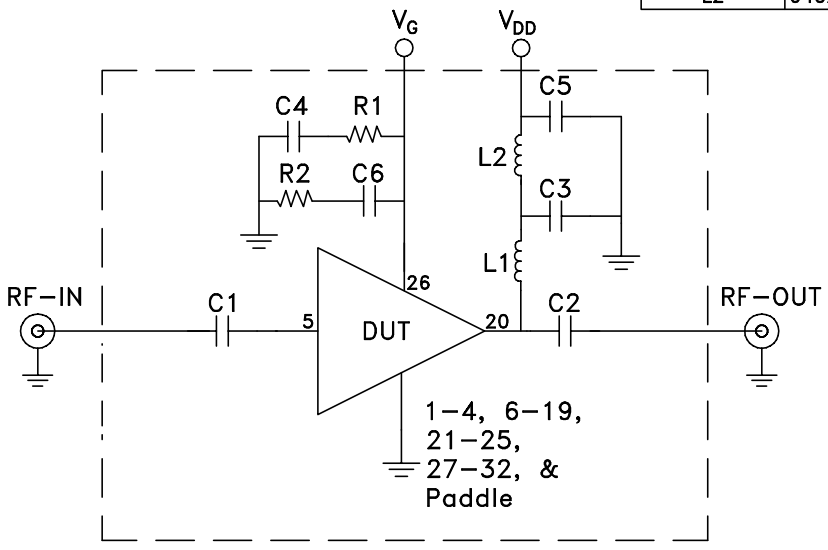
FILE:	SCALE:	SHEET:
98PL859	4:1	1 OF 1

Evaluation Board and Circuit





Component	Size	Value	PartNumber	Manufacturer
R1– R2	0402	0Ω	RK73Z1ETTP	KOA SPEER ELECTRONICS
C1–C3	0402	1nF	GRM1555C1H102GA01D	MURATA
C4	1206	1µF	12061C105KAT2A	AVX CORPORATION
C5	0402	0.1µF	04025C104JAT2A	AVX CORPORATION
C6	0402	100pF	GRM1555C2A101JA01D	MURATA
L1	0402	18nH	0402HP–18NXGRW	COILCRAFT
L2	0402	47nH	0603HC–47NXJRW	COILCRAFT



SCHEMATIC

Notes:
1. 2.92mm Female Connectors.
2. PCB Material: Roger RO4003C or equivalent, Dielectric constant=3.38, Thickness=0.0087±.001 inch

Mini–Circuits®

Mini-Circuits

Environmental Specifications **ENV08T10**

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-45° to +85° C	Indicidual Model Data Sheet
Storage Temperature	-65° to 150°C	Individual Model Data Sheet
Moisture Sensitivity: Level 3	Bake at 125°C for 24 hours. Soak at 30°C/60%RH for 192 hours, Reflow 3 cycles at 260°C peak	J-STD-020D
Unbiased HAST	Temperature: 130°C, RH: 85%, Pressure: 33.3 psia Duration: 96 hours	JESD22-A118A, Test Condition A
Temperature Cycling	-65°C to +150°C, Dwell Time: 15 mins 500 cycles	JESD22-A104E, Condition C
HTSL	Temperature: 150°C Duration: 1000 hours	JESD22-A103E, Test Condition B
HTOL	1000 Hours at 125°C	JESD22-A108
ESD HBM	Refer datasheet for classification	JS-001
Vibration (Variable Frequency)	Sinusoidal vibration, 20 - 2000 Hz, 4 min sweeps, 16 min along each of 3 axis, amplitude limits of 20g and 0.06 in	MIL-STD-883, Method 2007, Condition A
Drop Test	1m drops onto concrete in final packed box in 6 orientations	--
Bend Test	1mm deflection for 5 seconds. Board thickness: 0.024", Span: 2.75"	--
Solderability	10x magnification	J-STD-002 Method B, B1

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Resistance to Soldering Heat	Sn-Pb Eutectic Process: 240°C peak Pb-Free Process: 260°C peak	J-STD-020