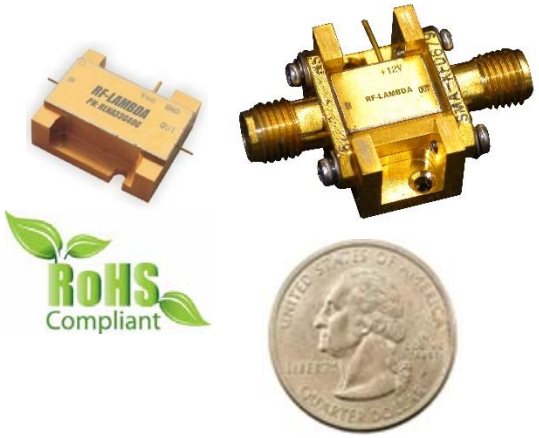
Low Noise Amplifier 2.2-2.5GMHz NF: 1.7dB



- BlueTooth
- Home RF
- 802.11 WLAN Radios
- PCMCIA Platforms
- 2.4 GHz LNA
- Noise Figure: 1.7 dB
- Gain: 19 dB
- Single Supply: +3V
- No External Components
- Ultra Small SOT26 Package

Electrical Specifi cations, TA = +25 ° C, Vdd= +3V

Parameter	Min.	Typ.	Max.	Units
Frequency Range		2.3 - 2.5		GHz
Gain	16	19		dB
Gain Variation Over Temperature		0.015	0.03	dB/° C
Gain Flatness		±1.25		dB
Noise Figure		1.7	2.5	dB
Input Return Loss		12		dB
Output Return Loss		4.5		dB
Output 1 dB Compression (P1dB)	2	6		dBm
Output Third Order Intercept (IP3)	9	12		dBm
Supply Current (Idd)		8.5	12.5	mA

Absolute Maximum Ratings

Drain Bias Voltage (Vdd)	+7 Vdc
RF Input Power (RFIN)(Vdd = +3 Vdc)	0 dBm
Channel Temperature	150 ° C
Continuous Pdiss (T = 85 ° C) (derate 6.35 mW/° C above 85 ° C)	0.413 W
Thermal Resistance (channel to lead)	157 ° C/W
Storage Temperature	-65 to +150 ° C
Operating Temperature	-40 to +85 ° C
ESD Sensitivity (HBM)	Class 1A

Low Noise Amplifier 2.2-2.5GMHz NF: 1.7dB

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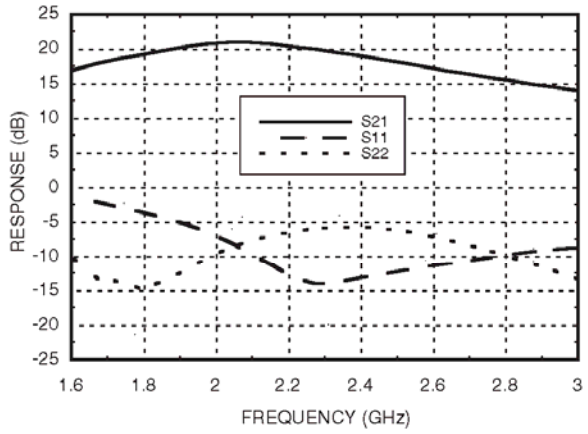
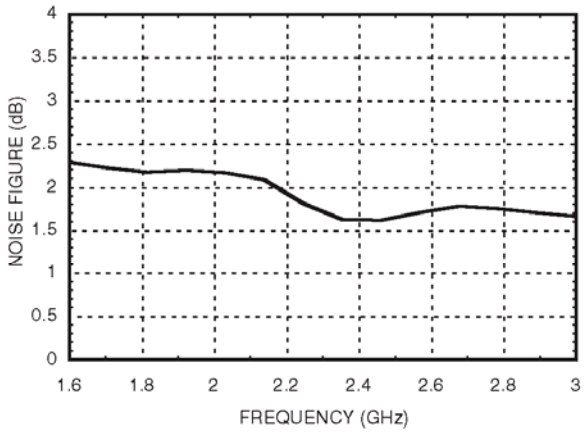
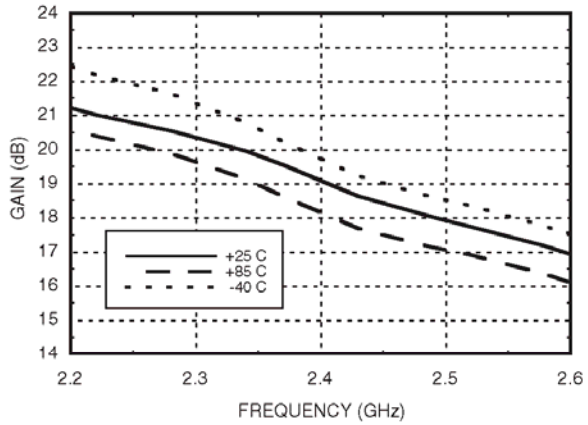
Broadband Gain & Return Loss



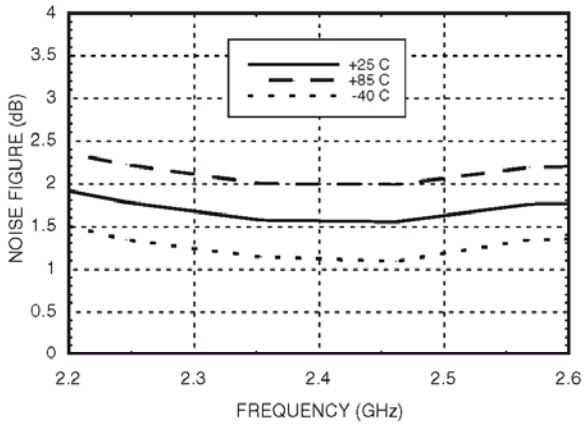
Broadband Noise Figure



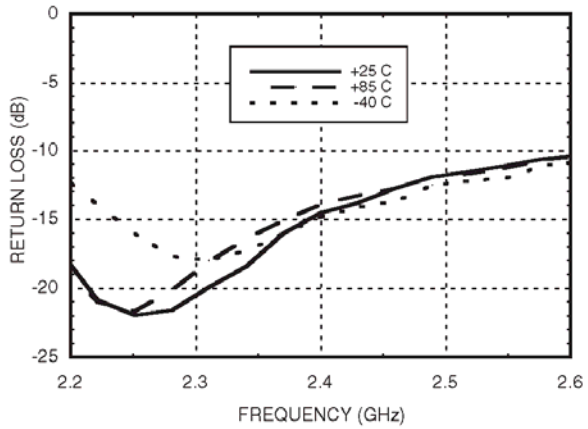
Gain vs. Temperature



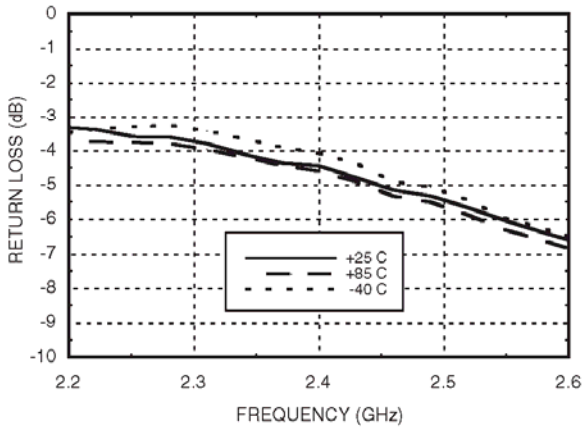
Noise Figure vs. Temperature



Input Return Loss vs. Temperature

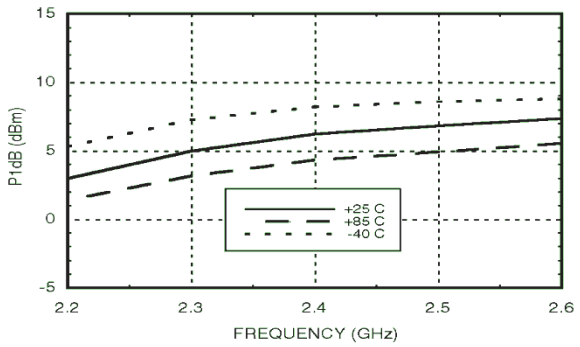


Output Return Loss vs. Temperature

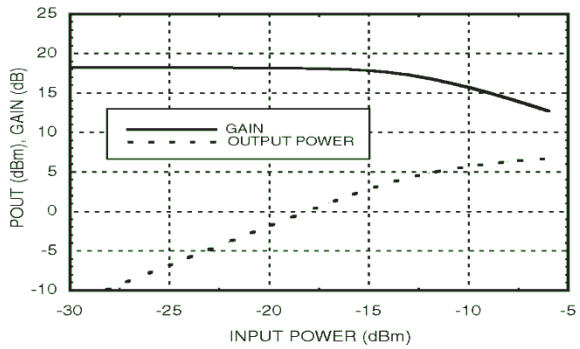


Low Noise Amplifier 2.2-2.5GMHz NF: 1.7dB

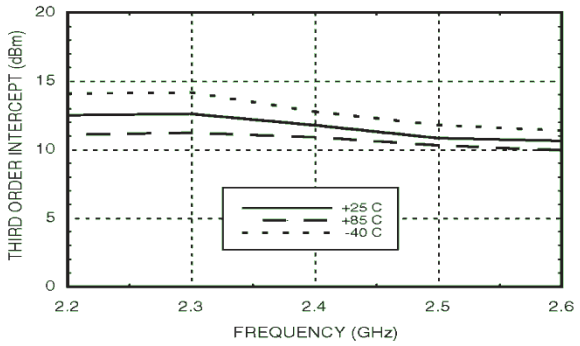
Output P1dB vs. Temperature



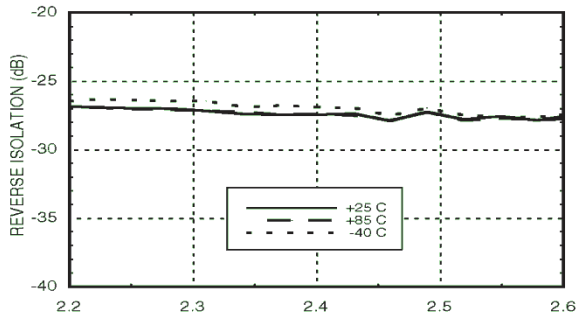
Power Compression @ 2.4 GHz

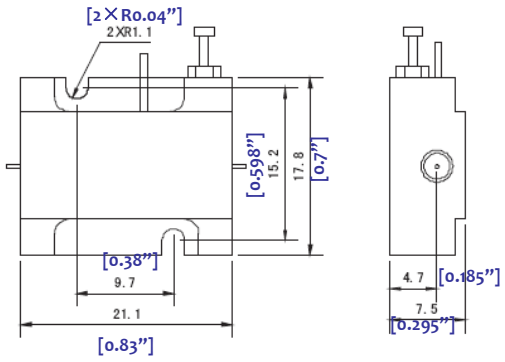


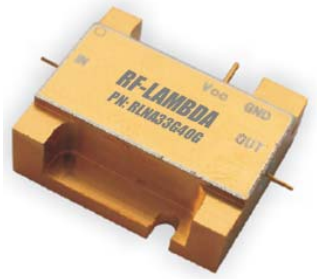
Output IP3 vs. Temperature



Reverse Isolation vs. Temperature







RoHS Compliant

Heat Sink required during operation. (Heat Sink sold separately)

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