

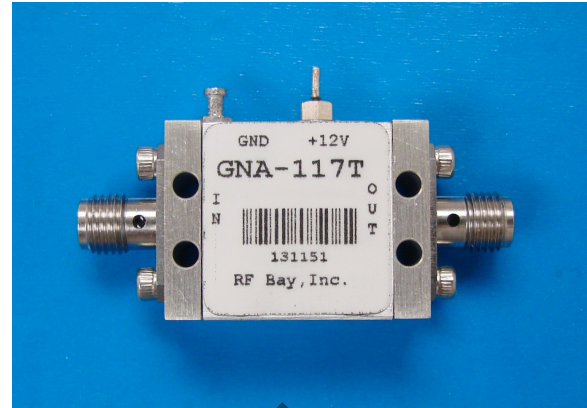
GNA Series

100 – 1500MHz Low Noise Amplifier

Features

- Frequency Range: 100–1500MHz
- Gain: 20dB
- P_{1dB} : +19dBm
- IP3: +33dBm
- Noise Figure: 0.4dB (typ.)
- DC Power: 12V @ 80mA
- SMA-female connectorized

Photo



Description

GNA-117T is a high performance Microwave Low Noise (& Driver) Amplifier, with standard frequency range of 100MHz to 1500MHz.

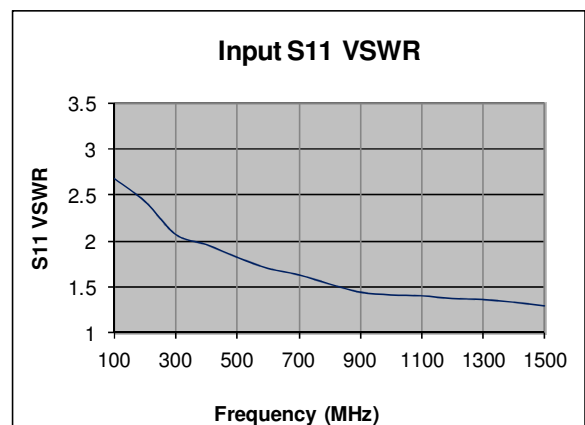
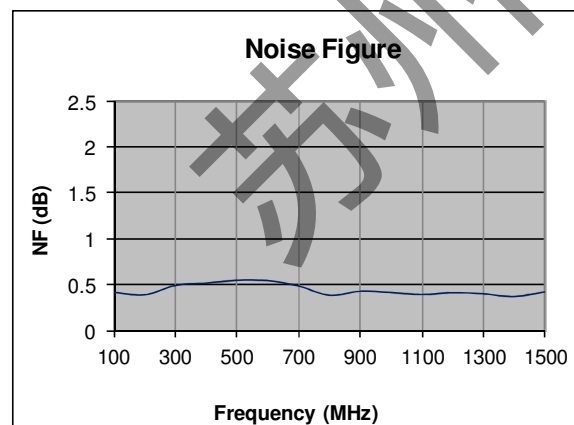
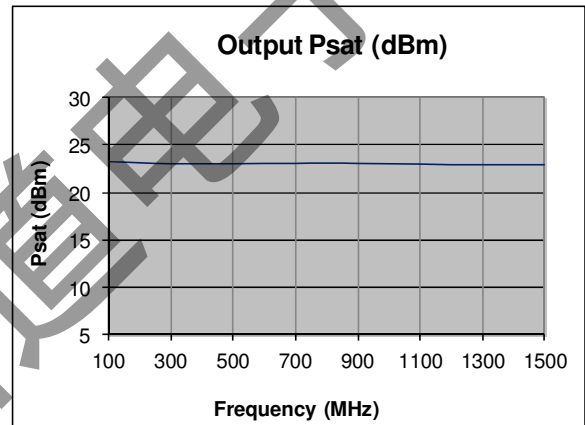
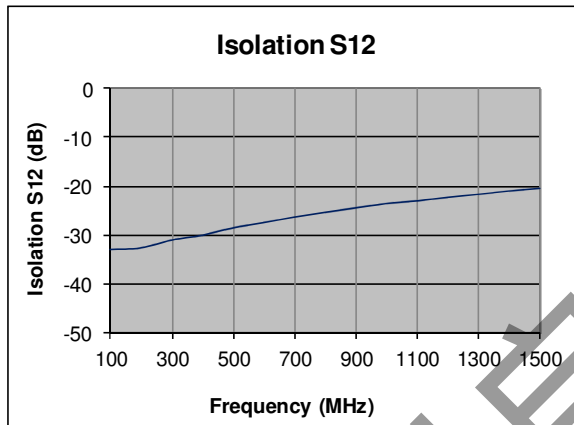
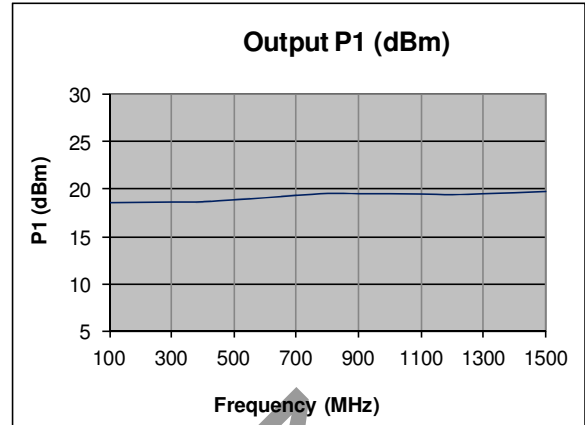
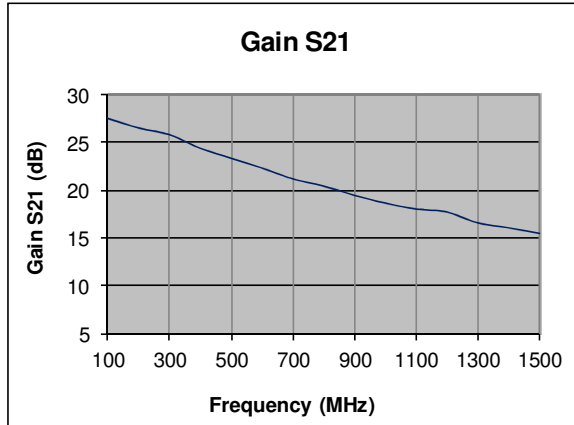
Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50$ Ohm, $V_{supply} = +12VDC$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	100		1500
Gain (S21) f = 100MHz	dB		27.5	
f = 800MHz	dB		20.0	
f = 1500MHz	dB		15.5	
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power P_{1dB}	dBm		+19	
Saturated Output Power P_{Sat}	dBm		+23	
Output Third Order Intercept IP3	dBm	+30	+33	
Noise Figure @800MHz	dB		0.4	0.6
Reverse Isolation (S12) @800MHz	dB		-25	
VSWR-Input (S11)	ratio:1	2.7@100MHz	1.5@800MHz	1.3@1500MHz
VSWR-Output (S22)	(unitless)	1.5@100MHz	1.7@800MHz	1.8@1500MHz
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		80	100
Operating Temperature	°C	-40		+85
Size (RF/DC feedthru's excluded)	Inch	1.00 (L) x 0.75 (W) x 0.45 (H)		
Weight	Oz	0.6 (17 grams)		

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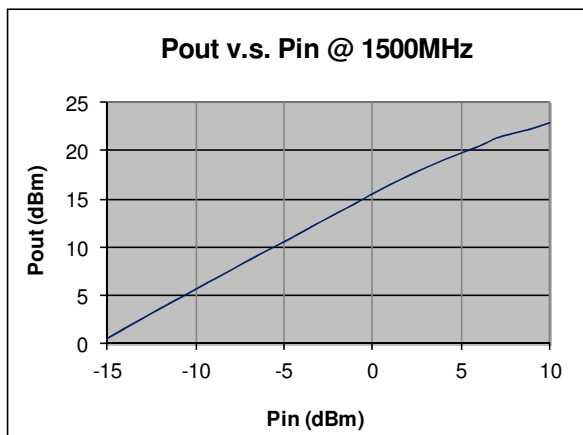
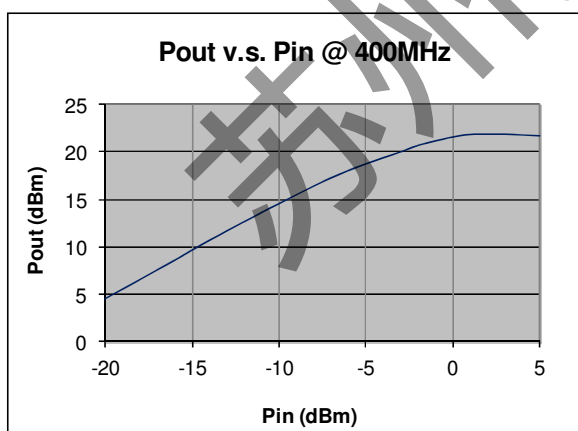
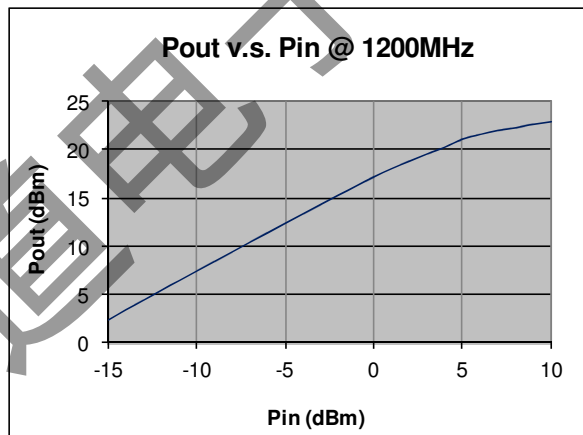
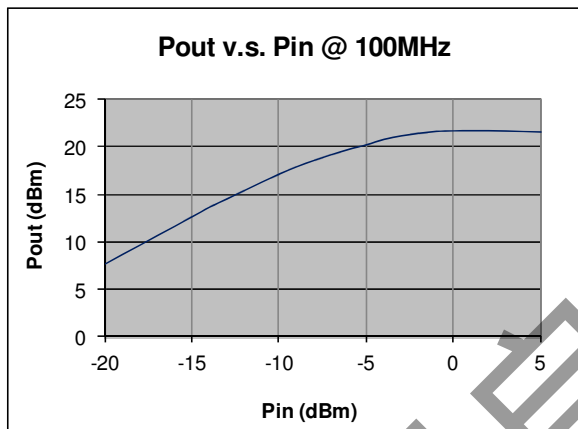
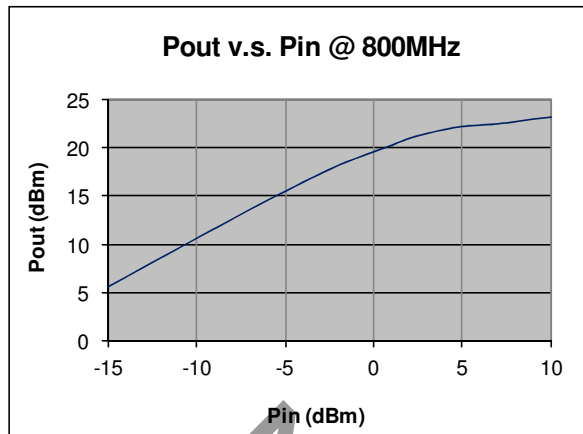
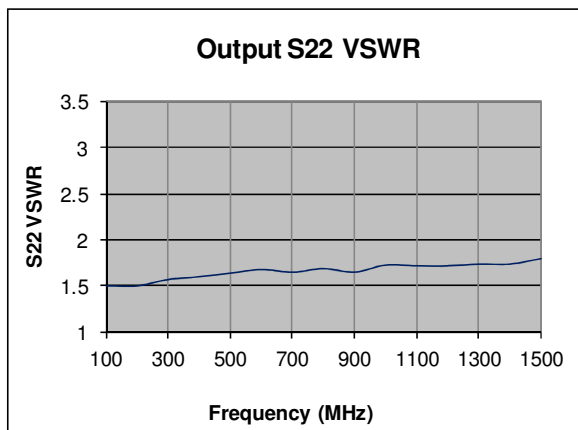
Typical Performance @+25 °C



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Typical Performance @+25 °C



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Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+20dBm
Supply Voltage (Survival)	+24V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

Outline

