

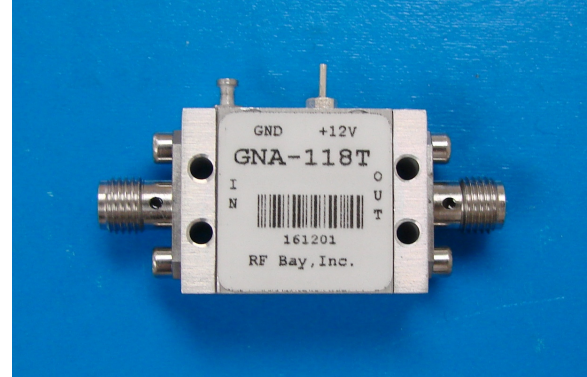
GNA Series

1800 – 3800MHz Low Noise Amplifier

Features

- Frequency Range: 1800–3800MHz
- Gain: 18dB
- P_{1dB} : +21dBm
- IP3: +39dBm
- Noise Figure: 0.8dB (typ.)
- DC Power: 12V @ 110mA
- SMA-female connectorized

Photo



Description

GNA-118T is a high performance Microwave Low Noise (& Driver) Amplifier, with standard frequency range of 1800MHz to 3800MHz.

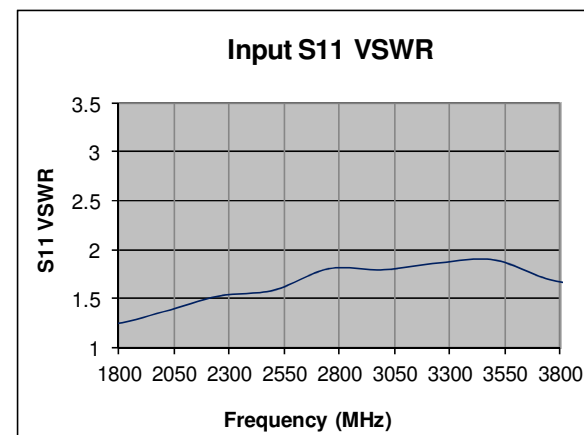
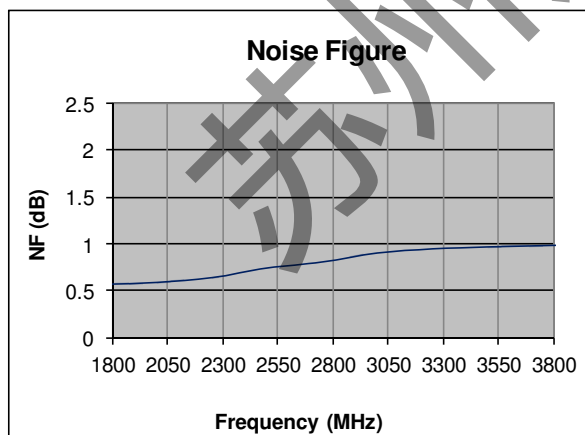
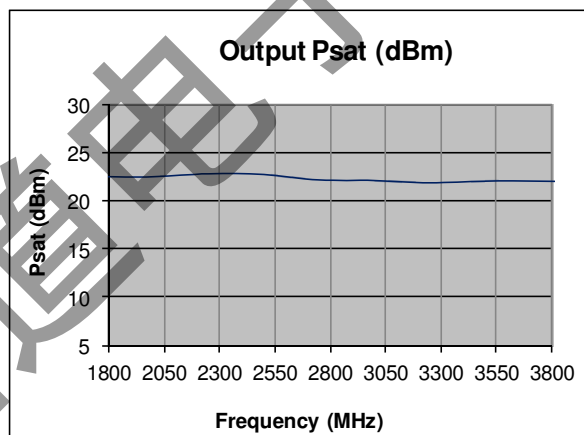
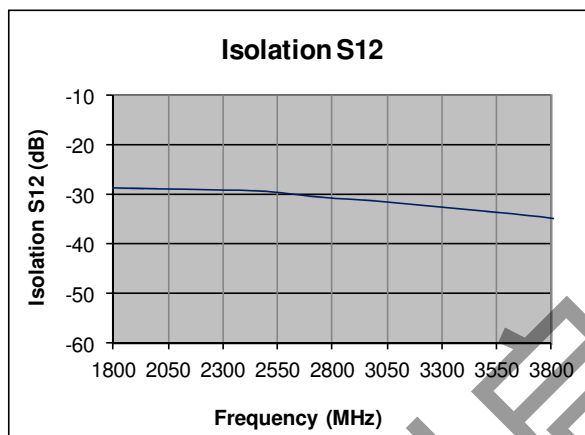
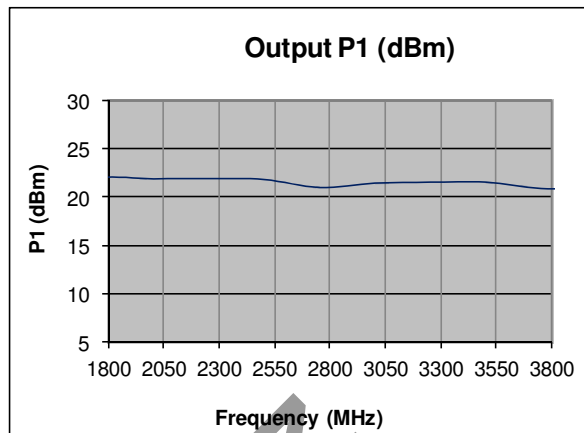
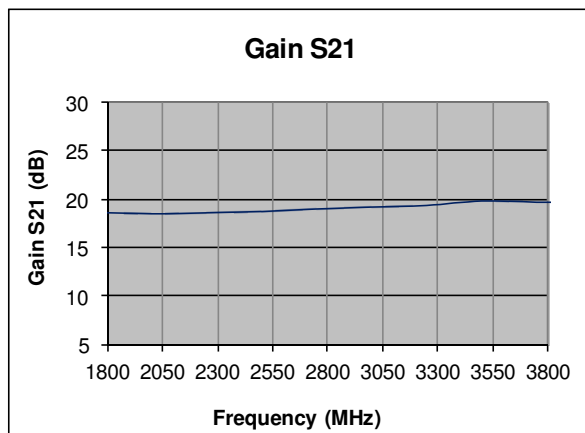
Electrical Specifications @+25 °C, $Z_{in}=Z_{out}=50\text{ Ohm}$, $V_{supply} = +12\text{VDC}$

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	1800		3800
Gain (S21) f = 1800MHz	dB		18.7	
f = 2800MHz	dB		19.0	
f = 3800MHz	dB		19.5	
Gain Variation Over Temperature	dB/°C		0.02	0.03
Output Power P_{1dB}	dBm		+21	
Saturated Output Power P_{Sat}	dBm		+22	
Output Third Order Intercept IP3	dBm	+39	+41	
Noise Figure @2800MHz	dB		0.8	1.0
Reverse Isolation (S12) @2800MHz	dB		-30	
VSWR-Input (S11)	ratio:1	1.3@1800MHz	1.8@2800MHz	1.7@3800MHz
VSWR-Output (S22)	(unitless)	1.1@1800MHz	1.6@2800MHz	2.1@3800MHz
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		110	130
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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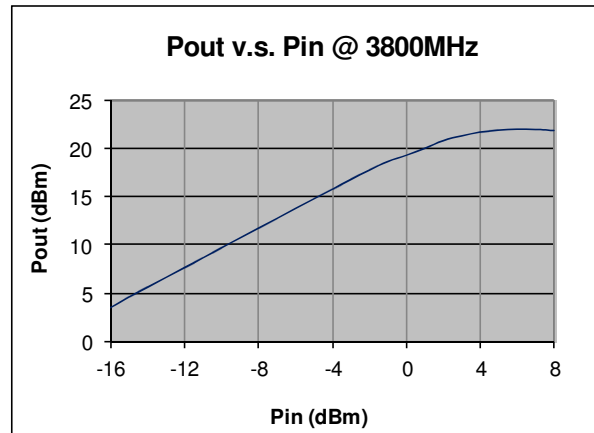
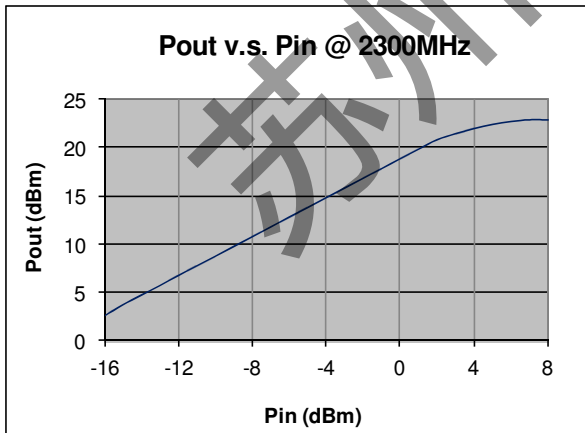
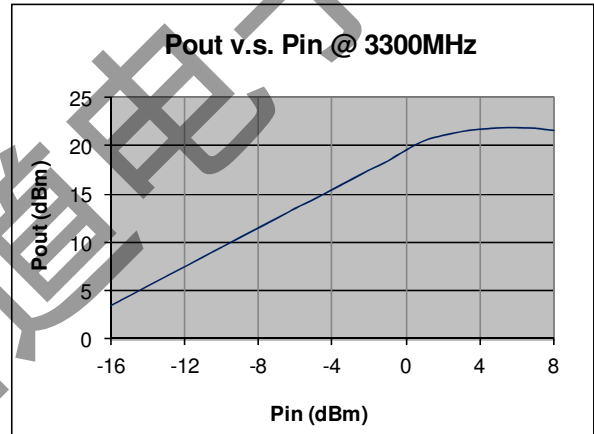
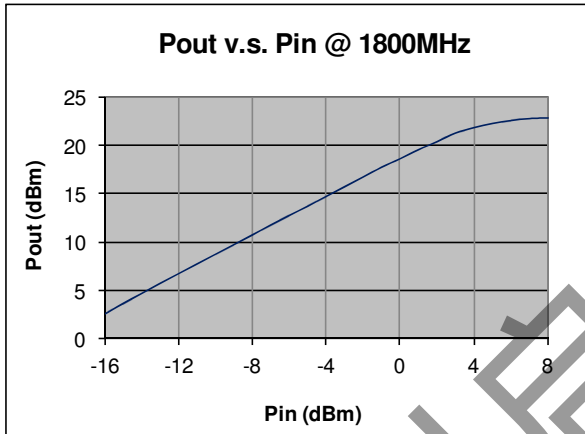
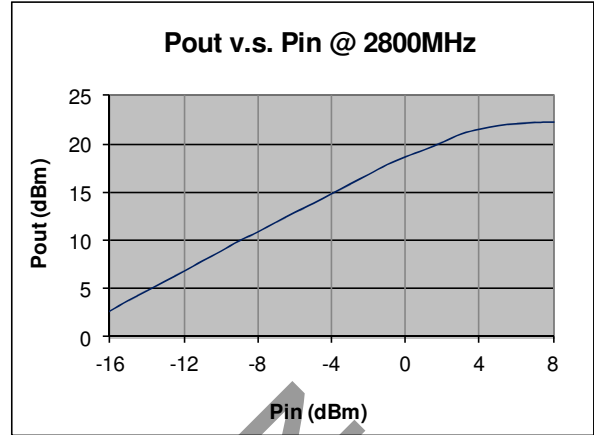
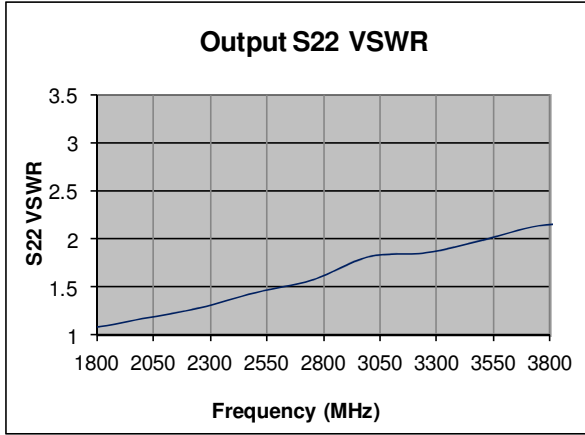
Typical Performance @+25 °C



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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

