

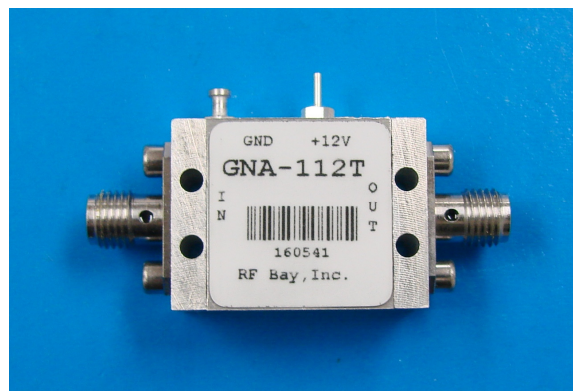
## GNA Series

## 500-4000MHz Low Noise Amplifier

### Features

- Frequency Range: 500-4000MHz
- Gain: 19dB
- P<sub>1dB</sub>: +17dBm
- IP3: +34dBm
- Noise Figure: 0.7dB
- DC Power: +9V to +15V @ 65mA
- Internally Voltage Regulated
- RF Connector: SMA-Female

### Photo



### Description

GNA-112T is a high performance Microwave Low Noise Amplifier, with standard frequency range of 500MHz to 4000MHz.

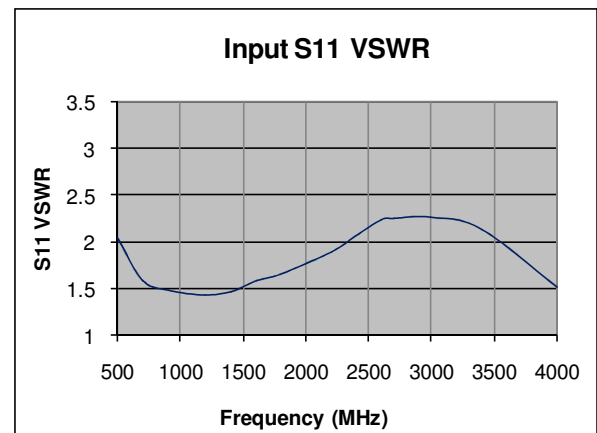
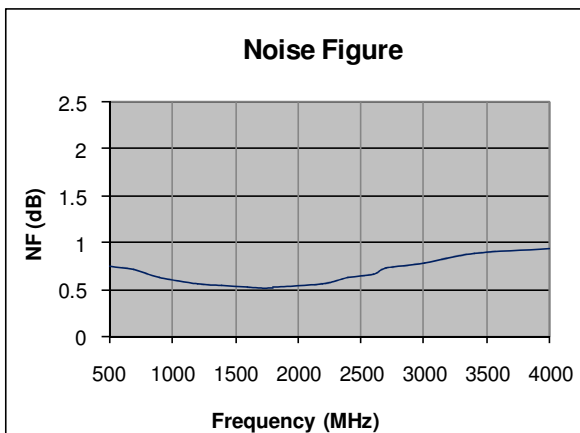
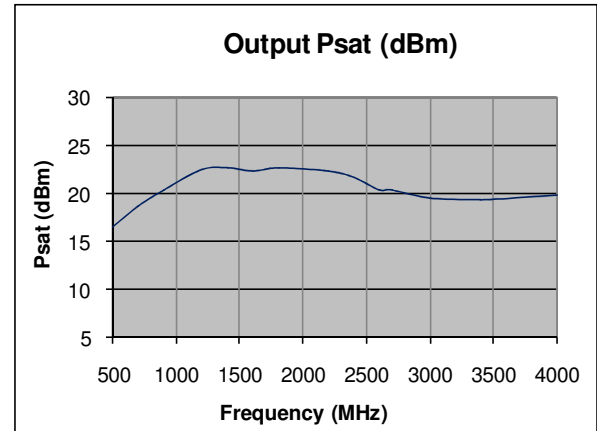
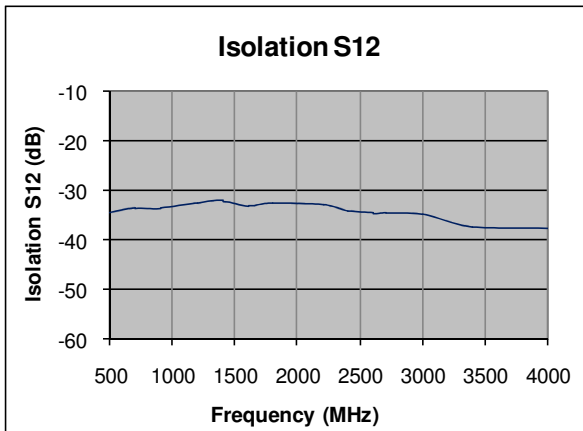
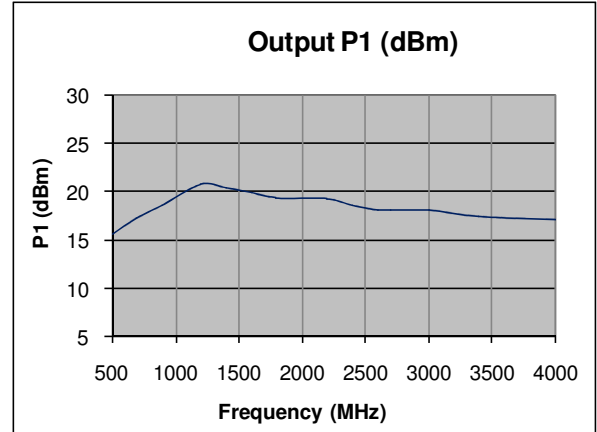
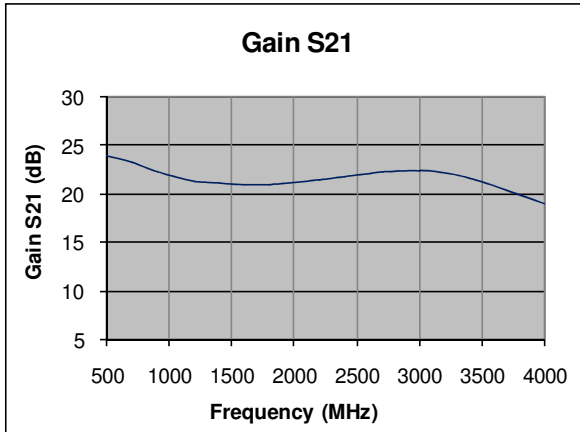
### Electrical Specifications @+25°C, Z<sub>in</sub>=Z<sub>out</sub>=50 Ω, V<sub>supply</sub> = +12VDC

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	500		4000
Gain (S <sub>21</sub> ) f = 500MHz	dB		24.0	
f = 2500MHz	dB		22.0	
f = 4000MHz	dB		19.0	
Gain Variation Over Temperature	dB/°C		0.014	0.025
Output Power P <sub>1dB</sub>	dBm		+17	
Saturated Output Power P <sub>Sat</sub>	dBm		+20	
Output Third Order Intercept IP3	dBm		+34	
Noise Figure @2500MHz	dB		0.7	0.9
Reverse Isolation(S <sub>12</sub> ) @2500MHz	dB		-33	
VSWR-Input (S <sub>11</sub> )	ratio:1	2.0 @500MHz	2.1 @2500MHz	1.5 @4000MHz
VSWR-Output (S <sub>22</sub> )	(unitless)	1.7 @500MHz	1.2 @2500MHz	1.7 @4000MHz
DC Power Supply - voltage	V	9	12	15
DC Power Supply - current	mA		65	75
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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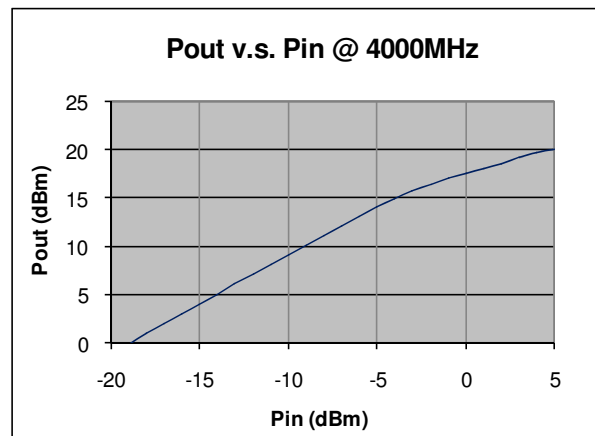
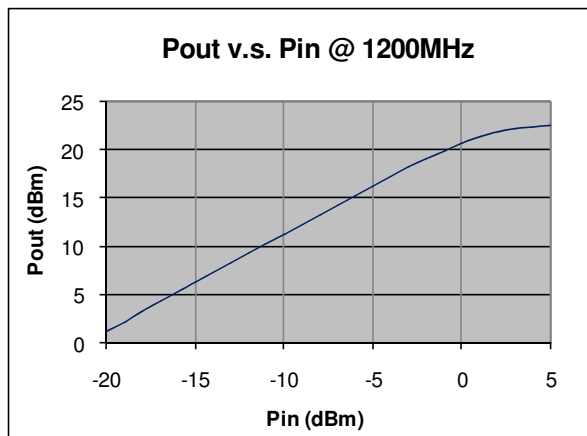
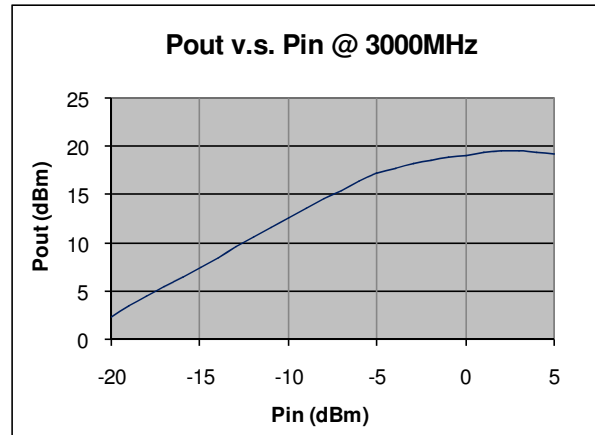
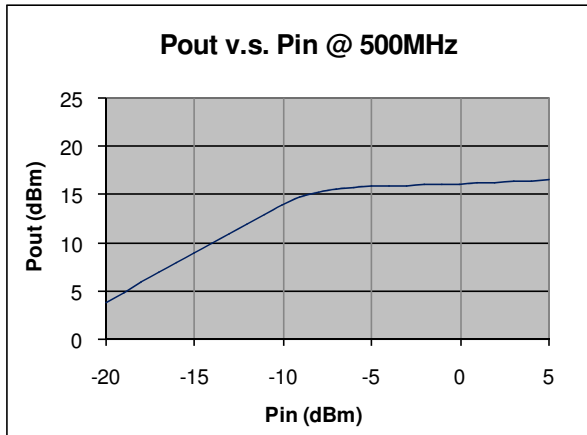
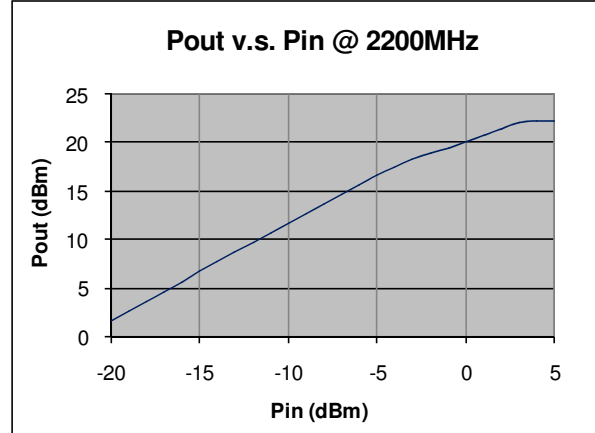
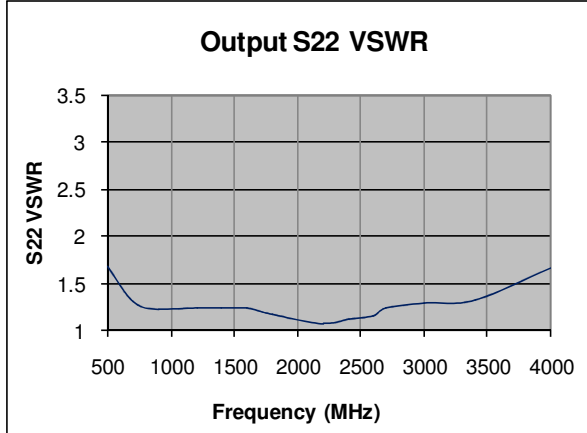
### Typical Performance @+25 °C



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### Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+27dBm
Supply Voltage (Survival)	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

### Outline

