RF BAY
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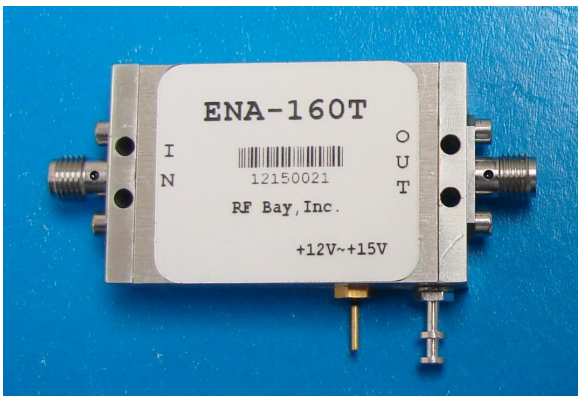
ENA-160T

ENA Series — 10 – 800MHz Low Noise Amplifier

Features

- Frequency Range: 10-800MHz
- Gain: 60dB
- P_{1dB}: +19dBm
- OIP3: +33dBm
- Noise Figure: 2.1dB (typ.)
- DC Power: 12V to 15V @ 160mA
- SMA-female

Photo



Description

ENA-160T is a high gain Low Noise Amplifier, with frequency range of 10 to 800MHz.

Electrical Specifications @+25 °C, Z_{in}=Z_{out}=50 Ω, DC Supply = +12VDC

Parameter		Unit	Minimum	Typical	Maximum
Frequency Range		MHz	10		800
Gain S21	f = 10MHz	dB	58.0	59.5	
	f = 400MHz	dB	58.5	60.0	
	f = 800MHz	dB	56.0	57.5	
Gain Flatness		dB		±1.5	±2.0
Output Power P_{1dB}	f = 400MHz	dBm	+15	+17	
Saturated Output Power P_{Sat}	f = 400MHz	dBm	+17	+19	
Output Third Order Intercept IP3	f = 400MHz	dBm	+25	+27	
Noise Figure	f = 400MHz	dB		2.1	3.0
Reverse Isolation S12	f = 400MHz	dB	-50	-60	
Input VSWR S11	f = 400MHz			2.0:1	2.5:1
Output VSWR S22	f = 400MHz			1.5:1	2.0:1
DC Power Supply - voltage		V	11	12	15
DC Power Supply - current		mA		160	180
Operating Temperature		°C	-40		+85
Size (RF/DC feedthrough excluded)		Inch	1.79 (L) x 1.10 (W) x 0.45 (H)		
Weight		Oz	1.4		

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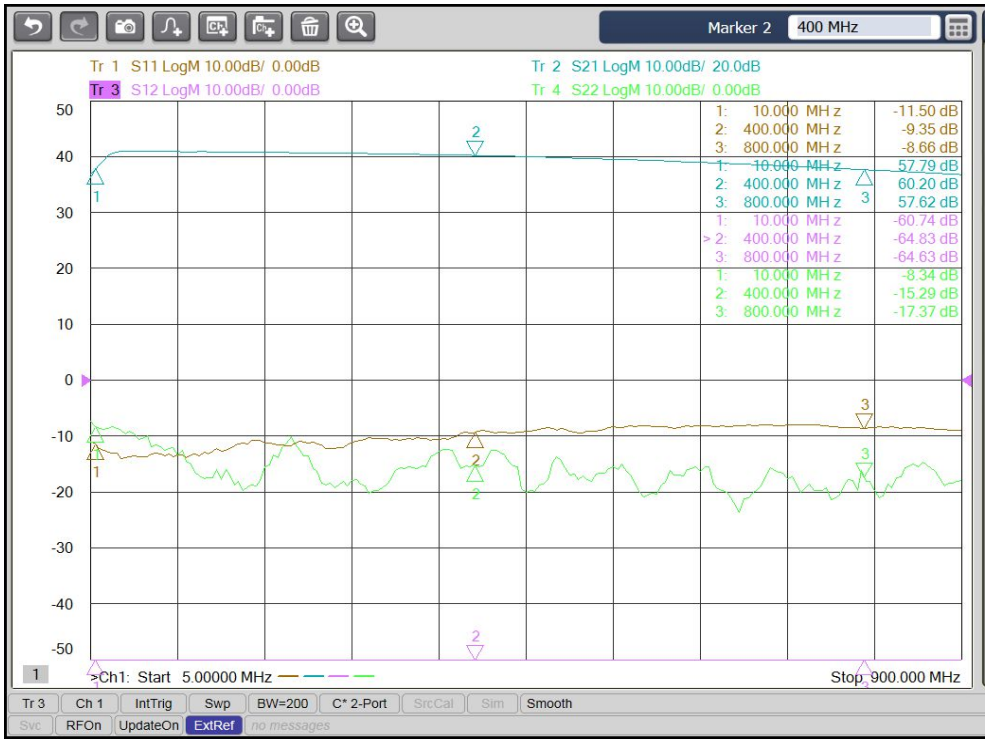
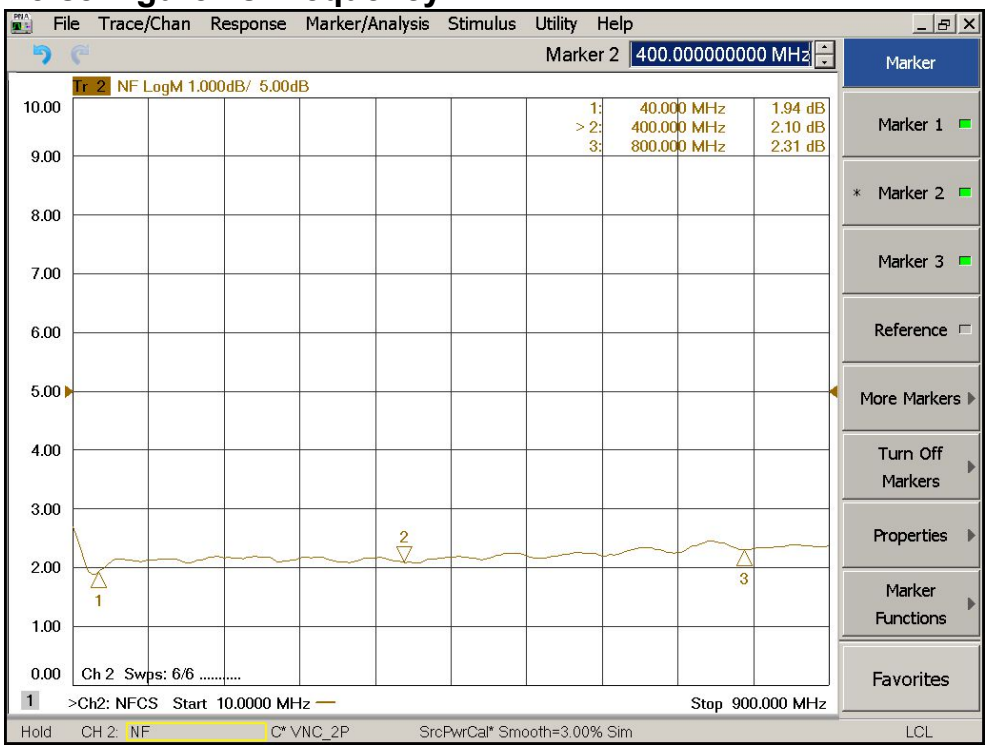
Gain S21, Isolation S12, Return Loss S11, S22 vs Frequency



Noise Figure vs Frequency



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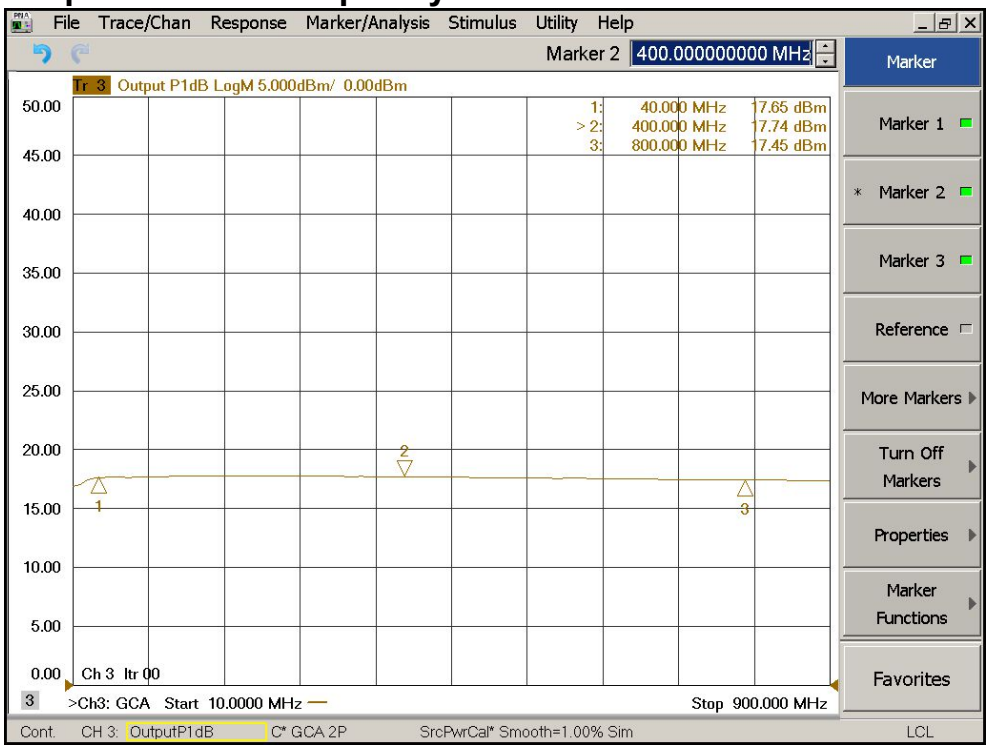
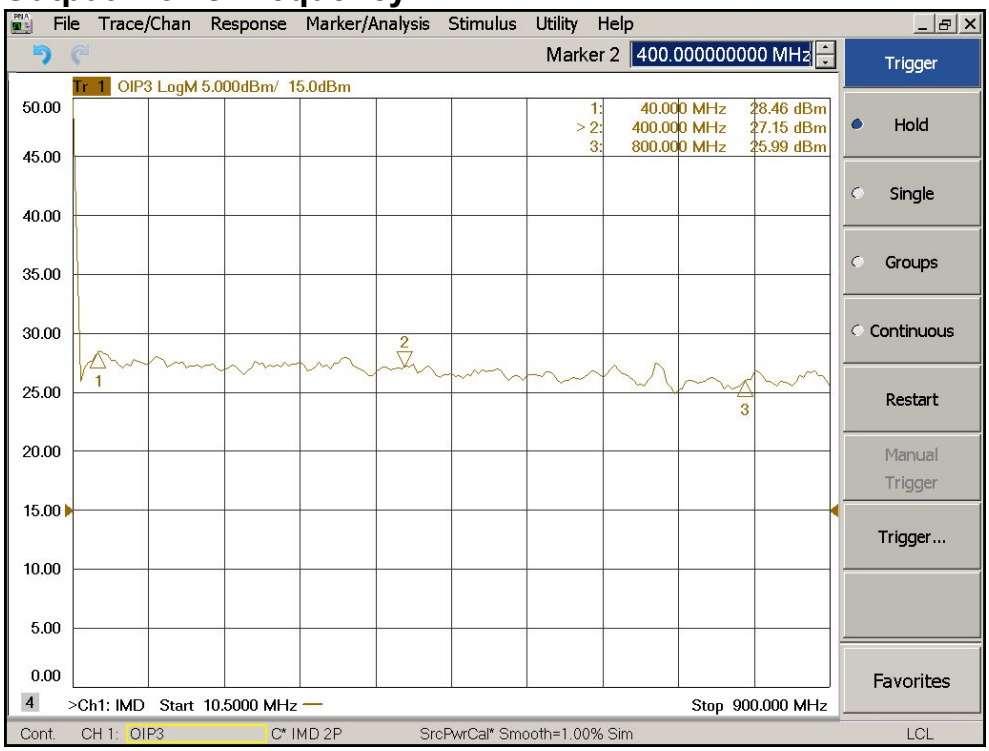
Output P1dB vs Frequency



Output IP3 vs Frequency



ENA Series

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Absolute Maximum Ratings

Parameter	Absolute Maximum
Supply Voltage	+20V
RF Input Power	13dBm
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material

Outline