RF BAY
www.rfbayinc.com

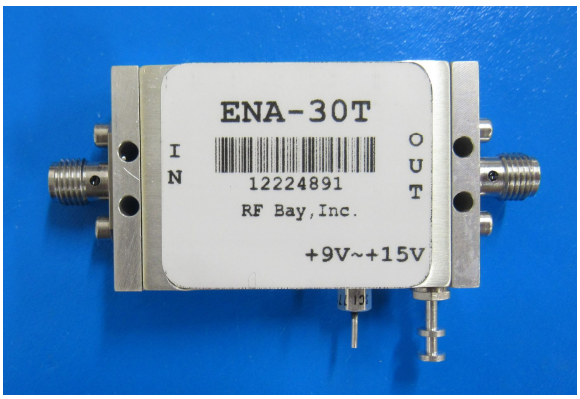
ENA-30T

ENA Series — 30 – 250MHz Low Noise Amplifier

Features

- Frequency Range: 30-250MHz
- Gain: 47dB
- P_{1dB}: +20dBm
- OIP3: +36dBm
- Noise Figure: 0.4dB (typ.)
- DC Power: 12V @ 160mA
- Internally Voltage Regulated
- SMA-female

Photo



Description

ENA-30T is a high gain Low Noise Amplifier, with frequency range of 30 to 250MHz.

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

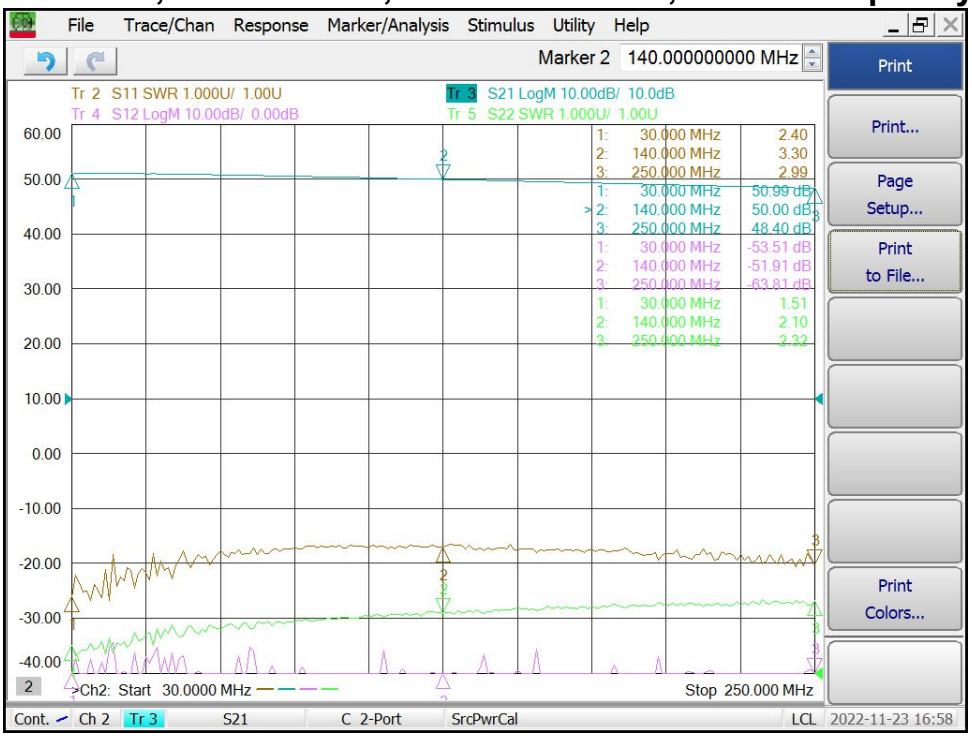
Parameter		Unit	Minimum	Typical	Maximum
Frequency Range		MHz	30		250
Gain S21	f = 30MHz	dB		51	
	f = 140MHz	dB	47	50	
	f = 250MHz	dB		48	
Gain Flatness		dB		±1.5	±2.0
Output Power P_{1dB}	f = 140MHz	dBm	+18	+20	
Output Third Order Intercept IP3	f = 140MHz	dBm	+33	+36	
Noise Figure	f = 140MHz	dB		0.4	0.6
Reverse Isolation S12	f = 140MHz	dB	-40	-50	
Input VSWR S11	f = 140MHz			3.3:1	3.8:1
Output VSWR S22	f = 140MHz			2.1:1	2.7:1
DC Power Supply - Voltage		V	9	12	15
DC Power Supply - Current		mA		160	180

WARNING: MUST USE HEAT SINK IF CASE TEMPERATURE EXCEEDS 50 °C

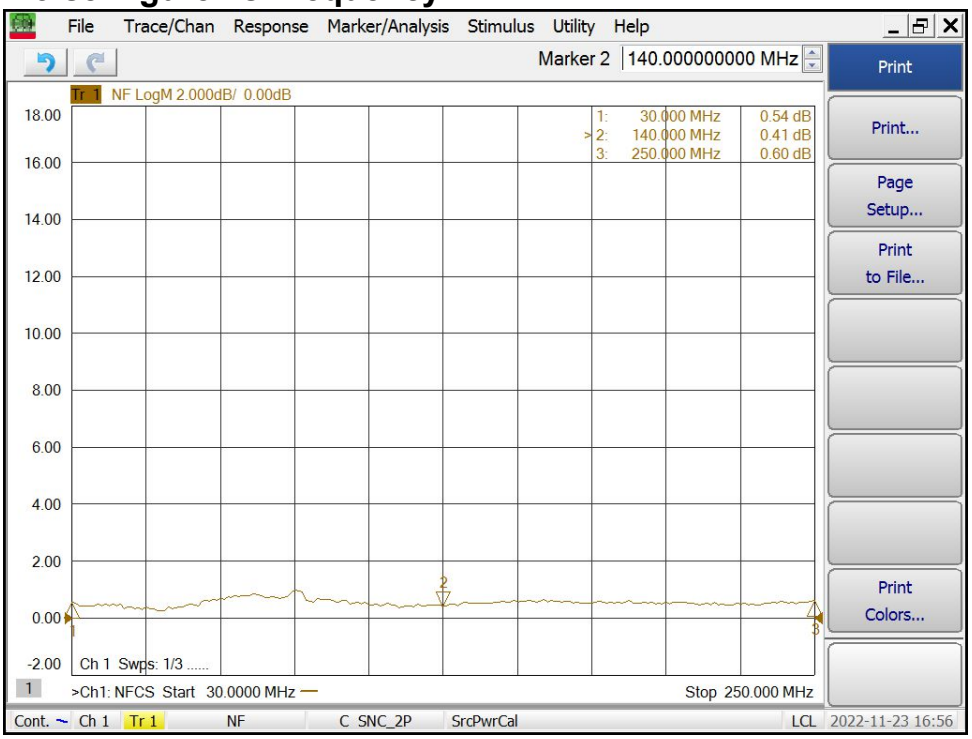
ENA Series

30 – 250MHz Low Noise Amplifier

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



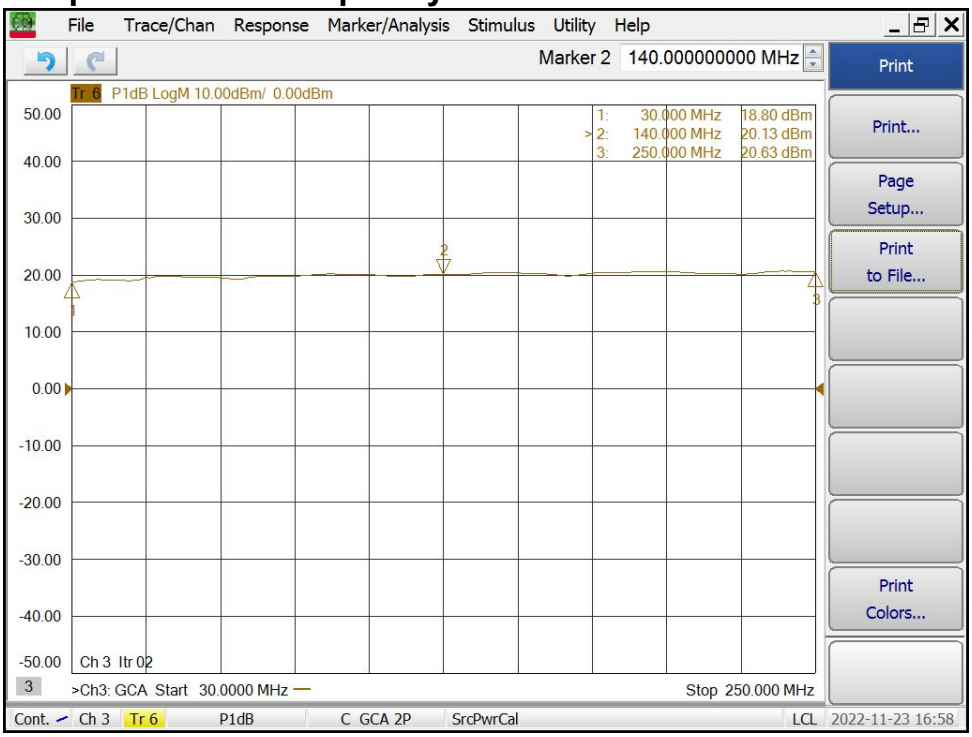
Noise Figure vs Frequency



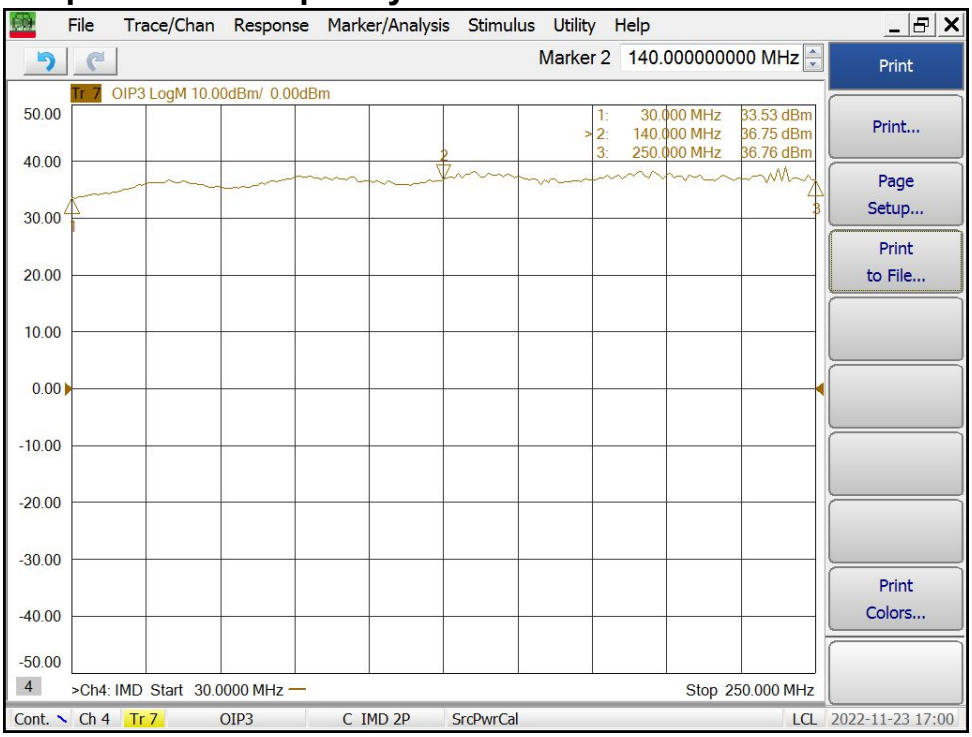
ENA Series

30 – 250MHz Low Noise Amplifier

Output P1dB vs Frequency



Output IP3 vs Frequency



ENA Series — 30 – 250MHz Low Noise Amplifier

Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+22dBm
DC Supply Voltage	+20V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material

RoHS (EU)/2015/863 COMPLIANT

CE

Outline

Unit: Inch [mm]