

LOW NOISE AMPLIFIER, 18-40GHz, Gain 53dB

Model: LF-LA5330-1840G

FEATURES:

- Ultra Wide Band: 18-40GHz
- Gain: 53dB Typ
- Noise Figure: 2.5dB Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

ELECTRICAL SPECIFICATIONS:

Parameter	Min	Typ	Max	Units
Frequency range	18-40			GHz
Gain	50	53		dB
Gain Flatness		± 3		dB
Noise Figure		2.5	3.5	dB
Output P1dB		16		dBm
Output IP3		2.5		:1
Input VSWR		2		:1
Output VSWR		12	15	V DC
DC Voltage		180		mA
DC Supply Current		80		mA
Impedance	50			Ohms

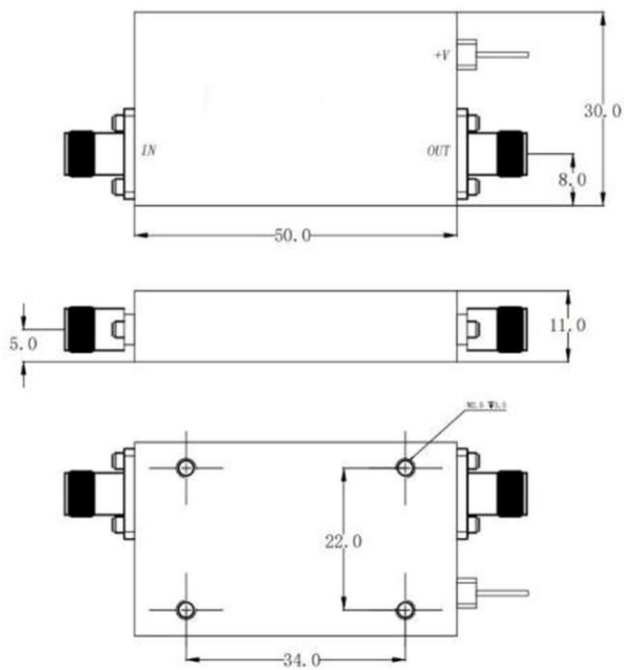
MECHANICAL SPECIFICATIONS:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	50*30*11	mm
Weight	55	g

ABSOLUTE MAXIMUM RATINGS:

Parameter	Value
Supply Bias Voltage	+15V
RF Input Power	15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

OUTLINE DRAWING: mm (inches). Heat Sink required during operation

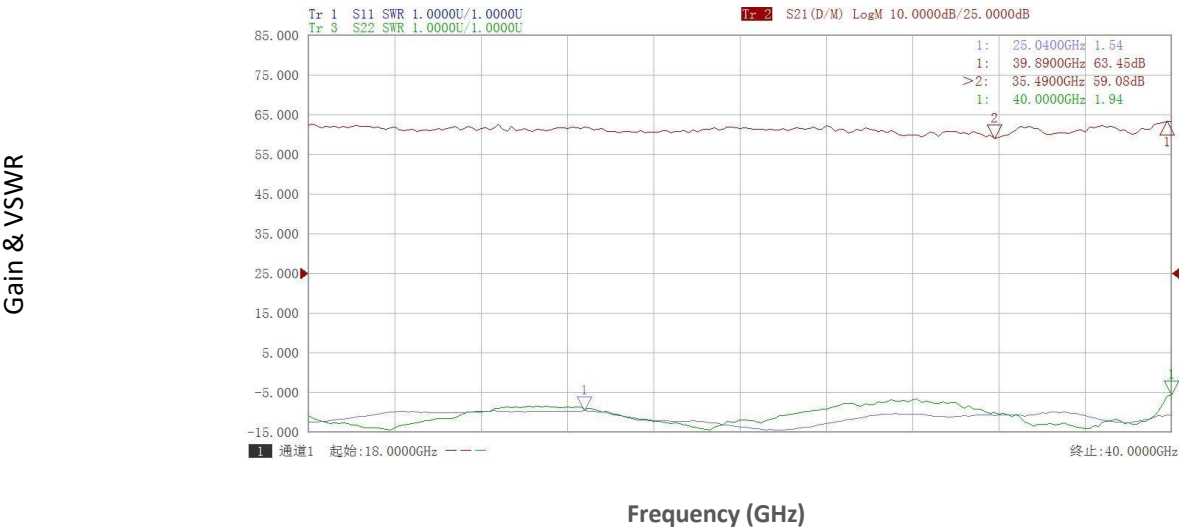


ENVIRONMENTAL CONDITIONS:

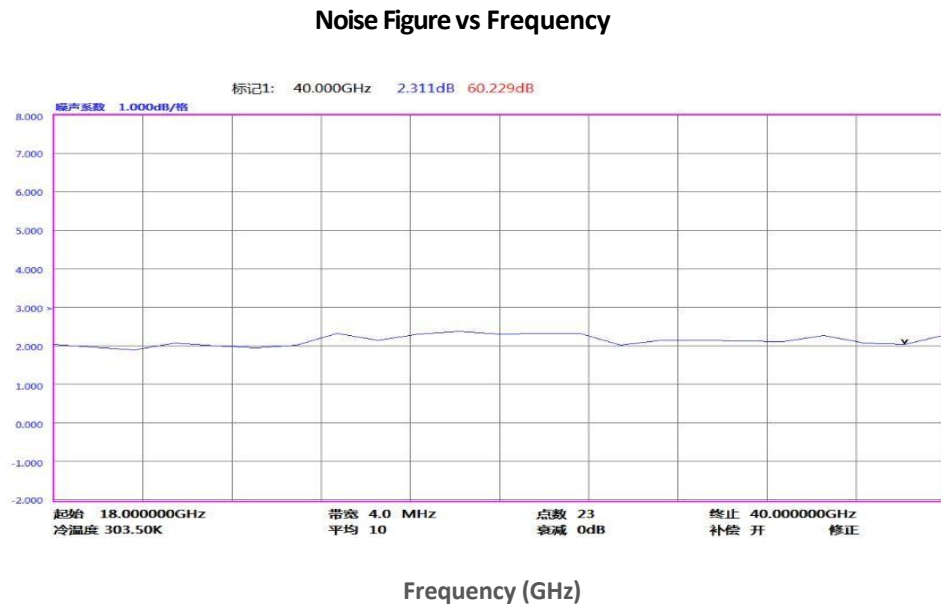
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration (MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock (non operating)	20G for 11msc half sin wave, 3 axis both directions			

TYPICAL PERFORMANCE DATA:

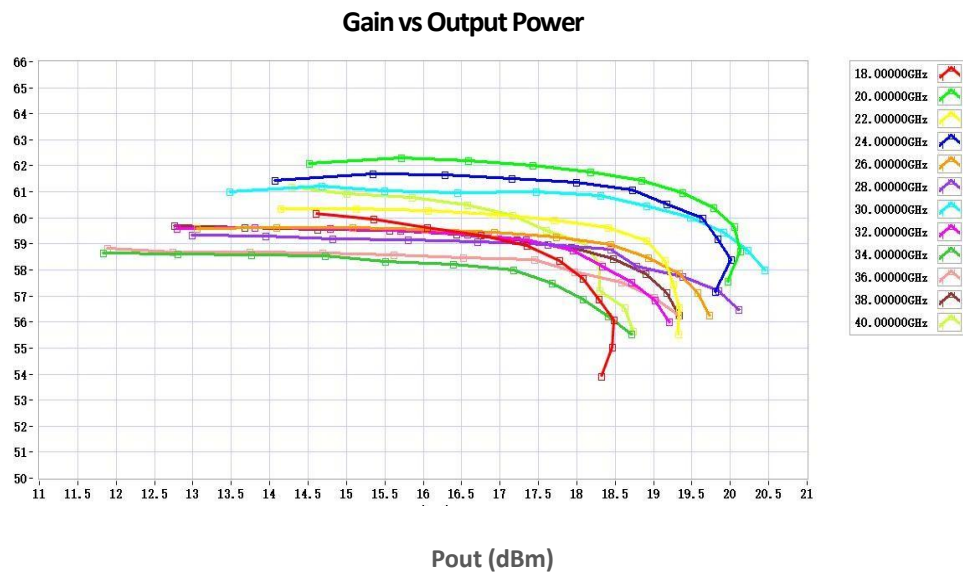
Gain & VSWR vs Frequency



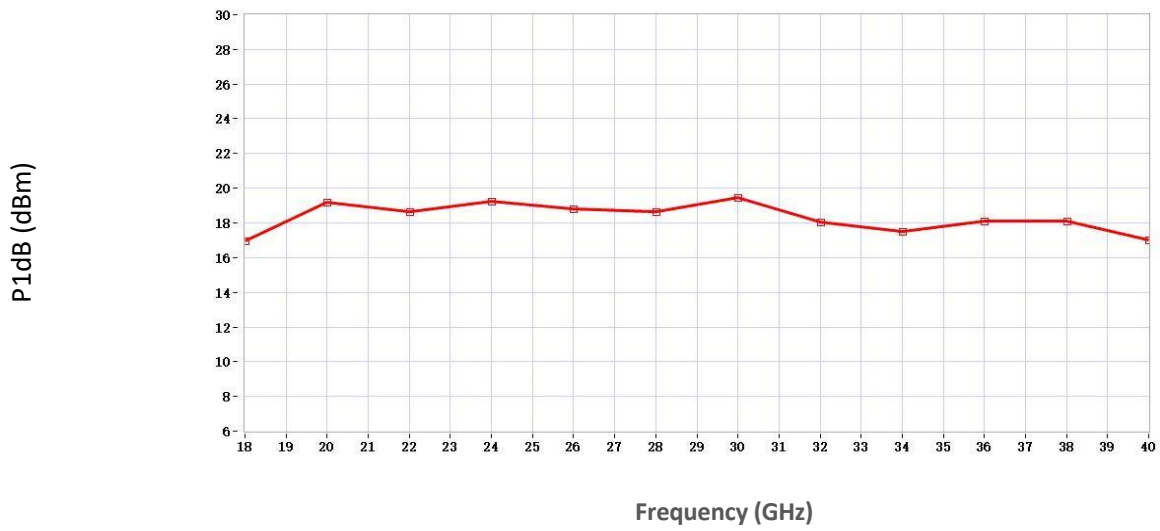
Noise Figure (dB)



Gain (dB)



P1dB vs Frequency



ORDERING INFORMATION:

Part Number	Description
LF-LA5330-1840G	Low Noise Amplifier, 18-40GHz, Noise Figure:2.5dB, Gain:53 dB,P1dB:16dBm,+12V DC, Without Heatsink
LF-LA5330-1840G-HS	Low Noise Amplifier, 18-40GHz, Noise Figure:2.5dB, Gain:53 dB,P1dB:16dBm,+12V DC, With Heatsink