

LOW NOISE AMPLIFIER, 18-40GHz, Gain 36dB

Model: LF-LA3630-1840G

FEATURES:

- Ultra Wide Band: 18-40GHz
- Gain: 36dB Typ
- Noise Figure: 3.0dB Max
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

ELECTRICAL SPECIFICATIONS:

Parameter	Min	Typ	Max	Units
Frequency range	18-40			GHz
Gain		36		dB
Gain Flatness			± 2.5	dB
Noise Figure			3.0	dB
Output P1dB		15		dBm
Output IP3		-60		dBc
Input VSWR			2.2	:1
Output VSWR			2.2	:1
DC Voltage	8	12	15	V DC
DC Supply Current		80		mA
Impedance	50			Ohms

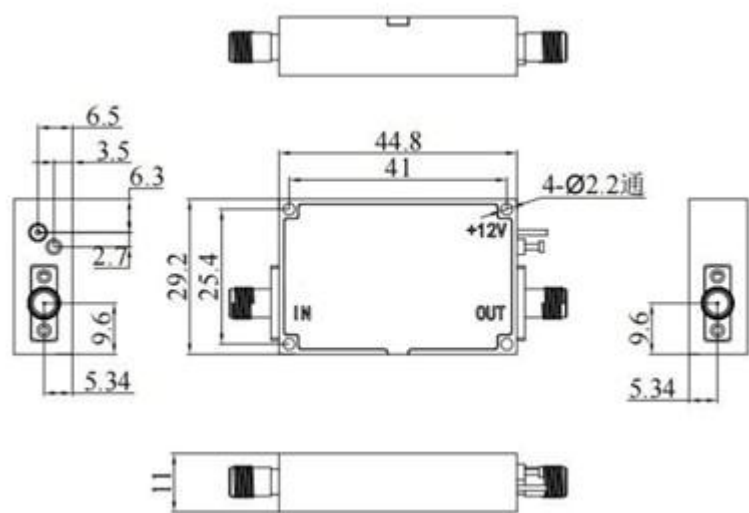
MECHANICAL SPECIFICATIONS:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Bias	Solder Pin	
Size	44.8*29.2*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

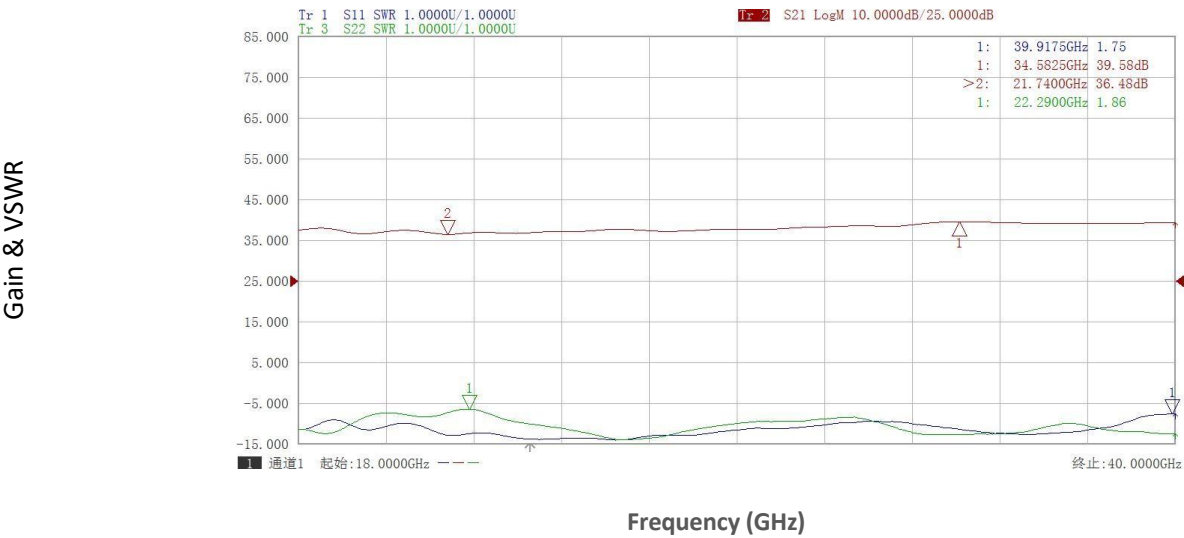


ENVIRONMENTAL CONDITIONS:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+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			

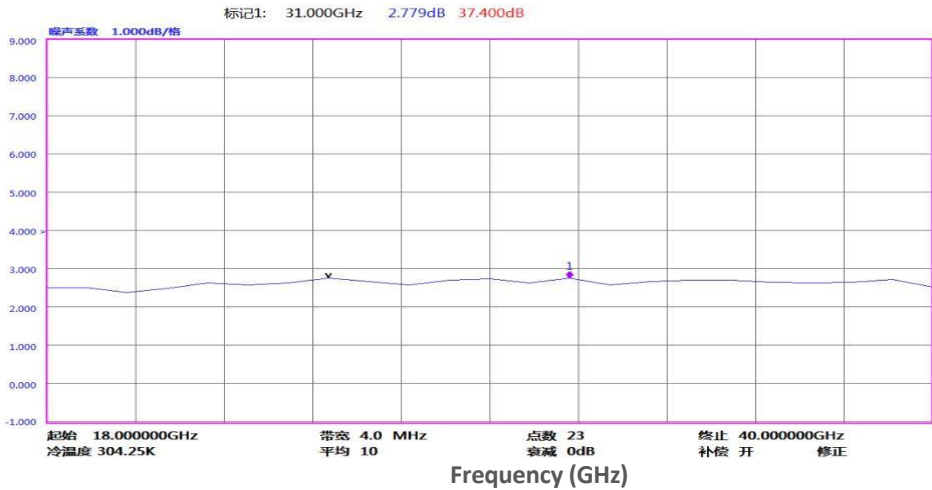
TYPICAL PERFORMANCE DATA:

Gain & VSWR vs Frequency



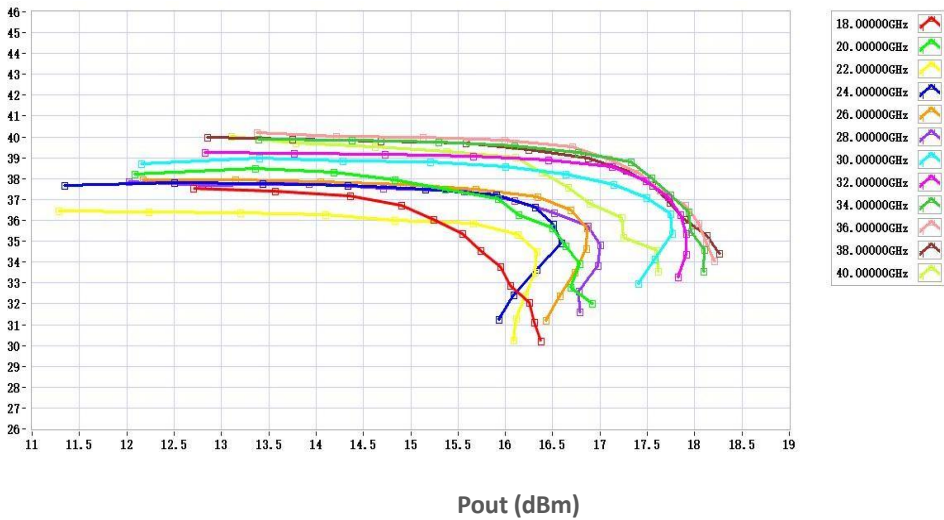
Noise Figure vs Frequency

Noise Figure (dB)



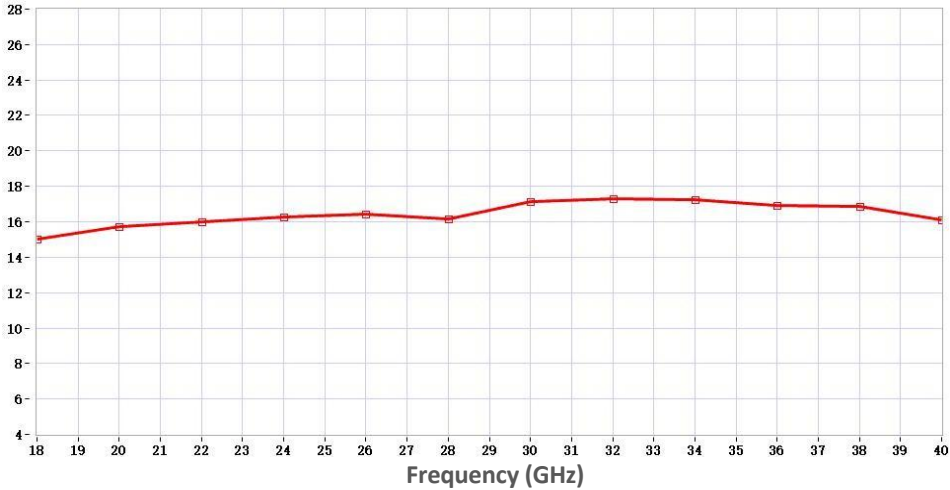
Gain vs Output Power

Gain (dB)

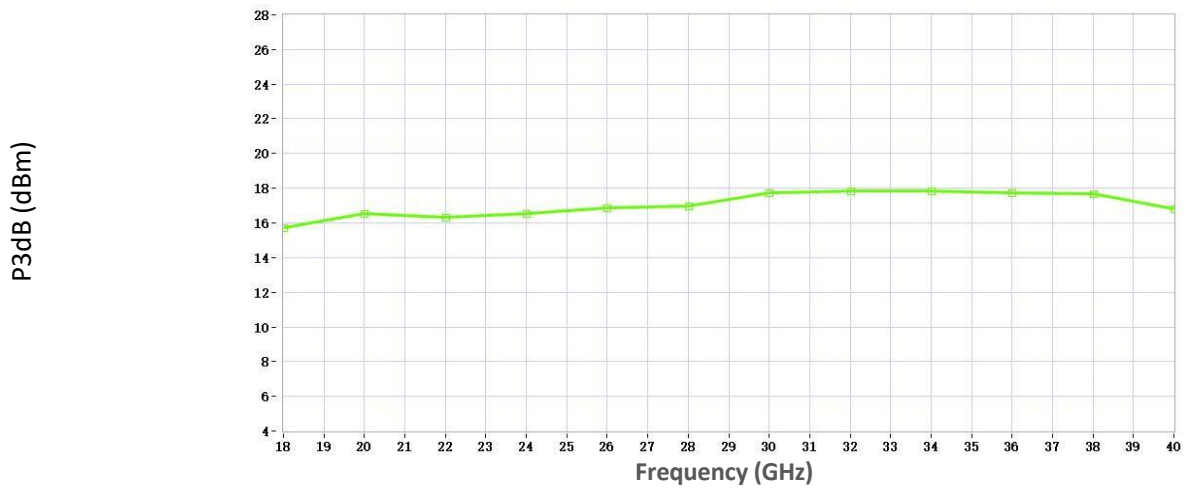


P1dB vs Frequency

P1dB (dBm)



P3dB vs Frequency



ORDERING INFORMATION:

Part Number	Description
LF-LA3630-1840G	Low Noise Amplifier, 18-40GHz, Noise Figure:3.0dB, Gain:36 dB,P1dB:15dBm,+12V DC, Without Heatsink
LF-LA3630-1840G-HS	Low Noise Amplifier, 18-40GHz, Noise Figure:3.0dB, Gain:36 dB,P1dB:15dBm,+12V DC, With Heatsink