

Широкополосный малошумящий усилитель 2 ГГц - 4 ГГц

Характеристики:

- Коэффициент усиления: 44 дБ (тип.)
- Шум: 1,8 дБ (тип.)
- Выходная мощность по уровню 1 дБ компрессии: +24 дБм (тип.)
- Напряжение питания: +12 В



Области применения:

- Беспроводные сети
- Сети 5G
- Оборудование для тестирования и измерений
- Микроэлектроника и спутниковая связь
- Оптоволоконные сети

Parameter	Min.	Typ.	Max.	Units
Frequency Range	2		4	GHz
Gain	42	44		dB
Gain Flatness		±0.5	±1.0	dB
Gain Variation Over Temperature (-40°C~+85°C)		±1.0	±1.5	dB
Noise Figure		1.8	2.5	dB
Input VSWR		1.5	2.0	: 1
Output VSWR		1.6	2.0	: 1
Output 1dB Compression Point (P1dB)	20	21		dBm
Saturated Output Power (Psat)		26		dBm
Output Third Order Intercept (OIP3)		28		dBm
Isolation S12		-55		dB
Supply Current (Vcc=+12V)		220	300	mA

Weight	Net	1.12 ounces (Max.)	Impedance	50ohms
	Including Heat sink	3.52 ounces (Max.)		
Input / Output Connectors	SMA-Female		Material	Aluminum
Finish	Gold Plated	Package Sealing	Epoxy Sealed (Standard)	
			Hermetically Sealed (Option with extra charge)	



P/N:LBW-AM06-LNAM-2G4G-44

Широкополосный малошумящий усилитель 2 ГГц - 4 ГГц

Absolute Maximum Ratings

Operating Voltage	+15V
RF Input Power(RFIN)	-9dBm

Biasing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +12V biasing

Power OFF Procedure

Step 1	Turn off +12V biasing
Step 2	Remove RF connection
Step 3	Remove Ground.

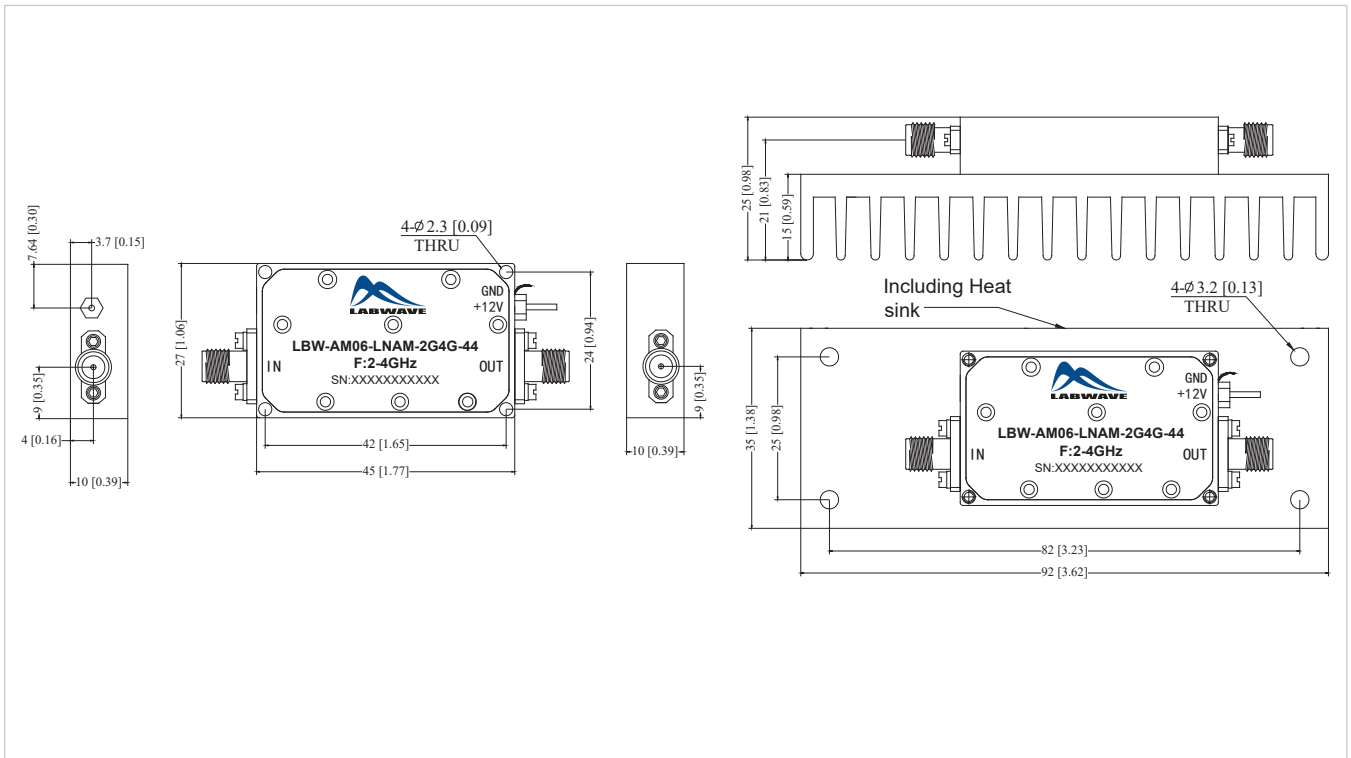
Environmental Specifications

Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave,3 axis both directions

Outline Drawing:

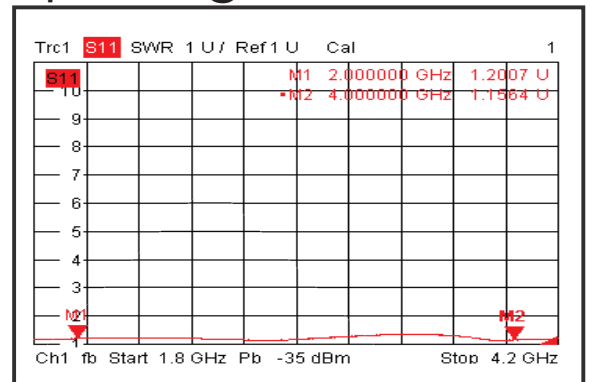
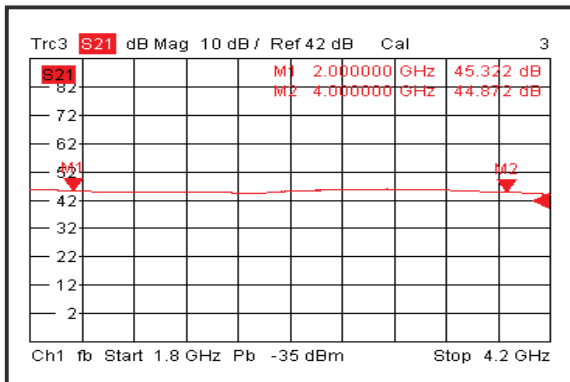
All Dimensions in mm (inches)
Tolerances $\pm 0.1(0.004)$
(Excl Heat Sink)

Heat Sink required during operation(Sold Separately)

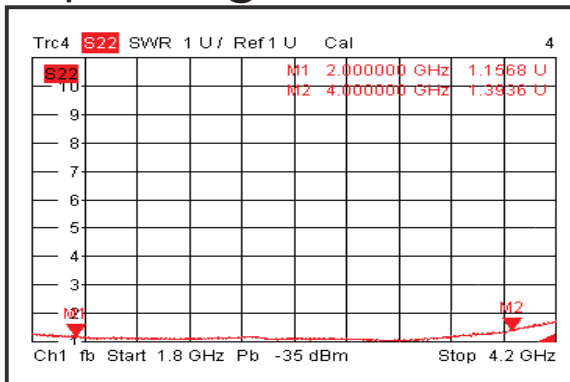


Широкополосный малошумящий усилитель 2 ГГц - 4 ГГц Input VSWR @+25°C

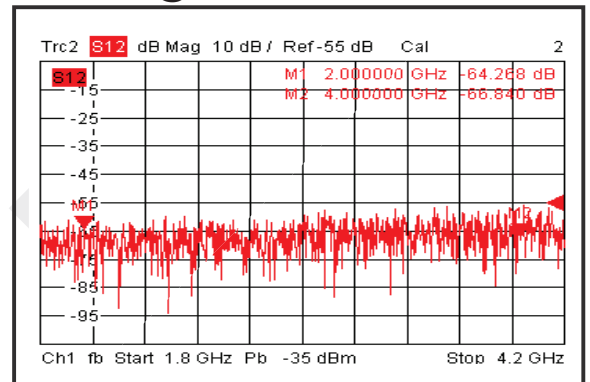
Gain @+25°C



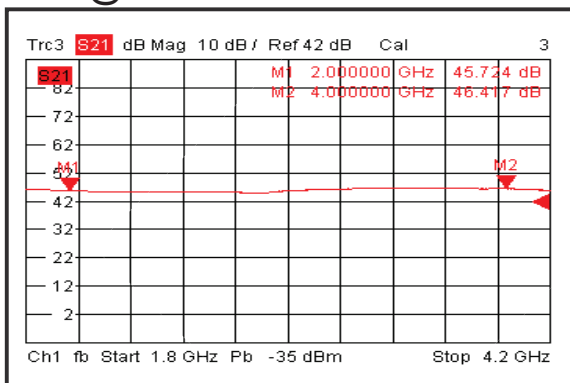
Output VSWR @+25°C



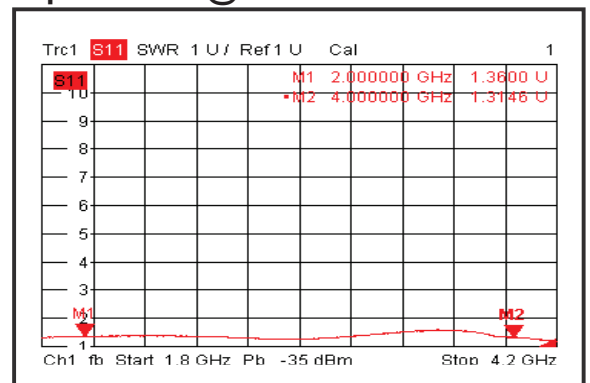
Isolation @+25°C



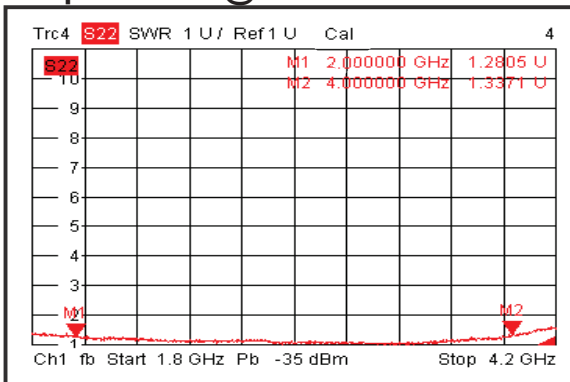
Gain @-40°C



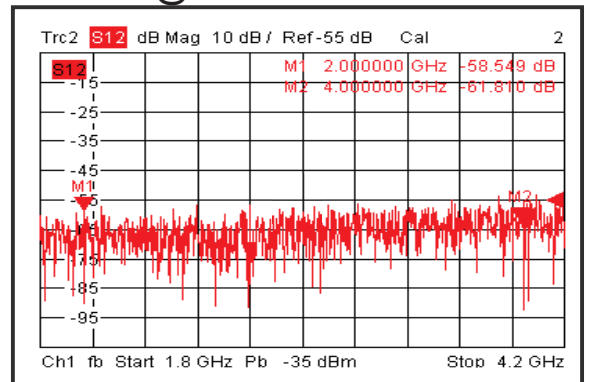
Input VSWR @-40°C



Output VSWR @-40°C

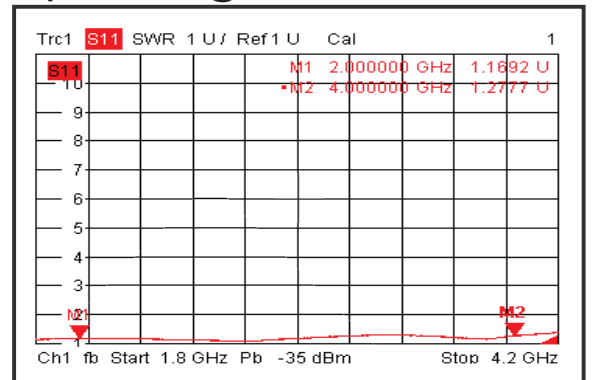
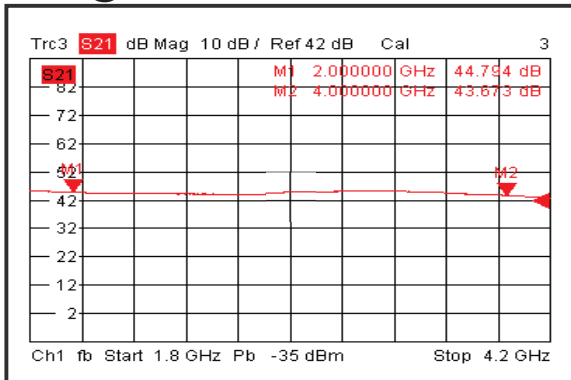


Isolation @-40°C

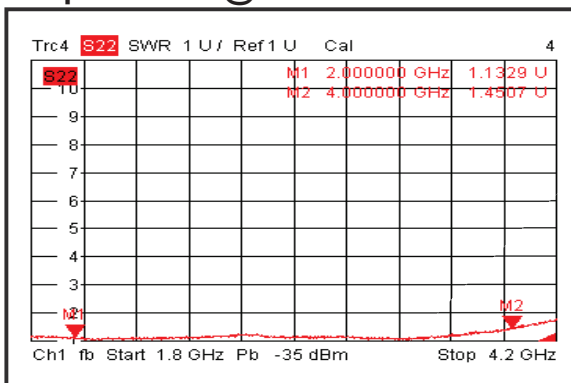


Широкополосный малошумящий усилитель 2 ГГц - 4 ГГц Input VSWR @+85°C

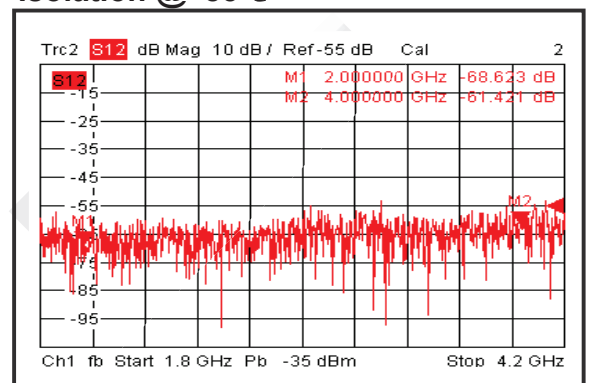
Gain @+85°C



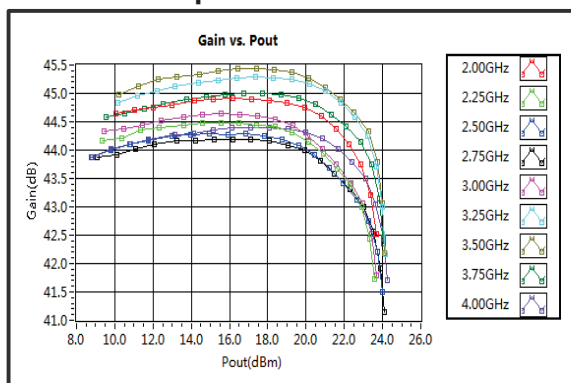
Output VSWR @+85°C



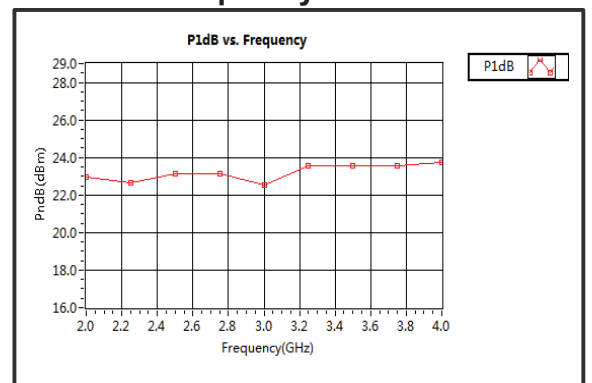
Isolation @+85°C



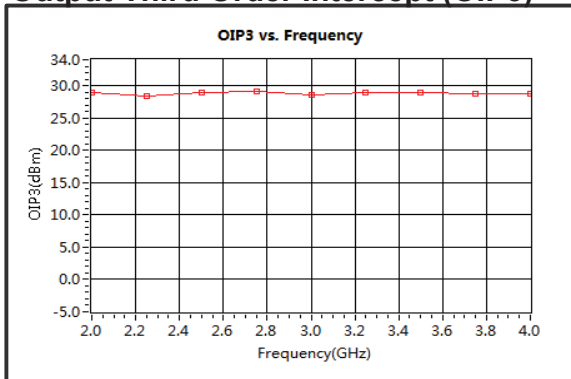
Gain vs. Output Power



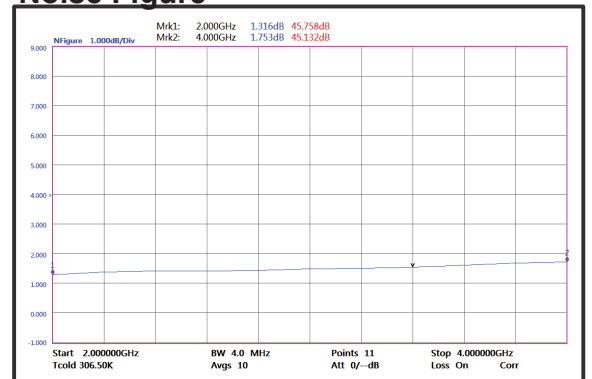
P1dB vs. Frequency



Output Third Order Intercept (OIP3)

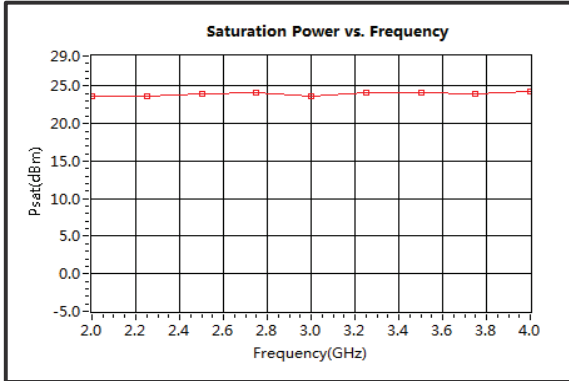


Noise Figure

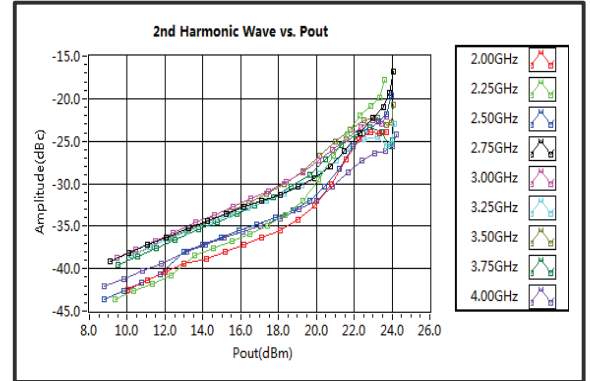


Широкополосный маломощный усилитель 2 ГГц - 4 ГГц

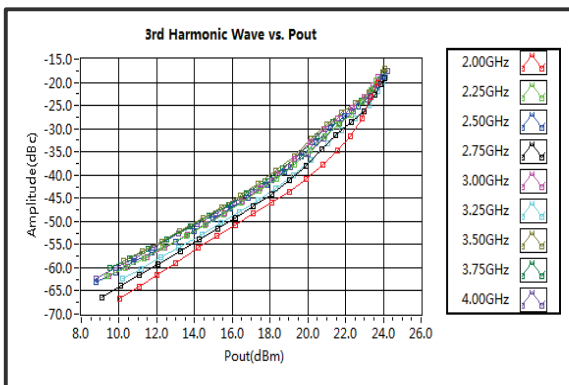
Saturation Power vs. Frequency



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power

