



# P/N:LBW-AM06-PAM-20G47G-24

Широкополосный усилитель мощности  
20 ГГц — 47 ГГц

## Характеристики:

- Коэффициент усиления: 35 дБ (тип.)
- Выходная мощность по уровню 1 дБ компрессии: 29 дБм (тип.)
- Напряжение питания: +24 В при 700 мА
- Согласованный вход/выход 50 Ом



## Области применения:

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

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	20		30	30		40	40		47	GHz
Gain	30	43	52	30	35	45	28	33	45	dB
Gain Flatness		±8.0			±2.5			±2.0		dB
Gain Variation Over Temperature (-40°C~+85°C)		±3.0			±3.0			±3.0		dB
Input VSWR		1.6			1.8			1.8		:1
Output 1dB Compression Point (P1dB)	25	29		27	28		24	25		dBm
Saturated Output Power (Psat)	26.5	29		27	29		24	26		dBm
Supply Current (Idd) @+24V		700	1200		700	1200		700	1200	mA
Fan Supply Current (Idd) @+24V		400			400			400		mA
Power Added Efficiency		5			5			5		%
Isolation S12		-60			-55			-55		dB

Weight	Net	10.85 Max. ounces	Impedance	50ohms
	Including Heat Sink	58 Max. ounces		
Input / Output Connectors	2.4mm-Female (2.92mm female optional)		Material	Copper
Finish	Nickel Plated	Package Sealing	Epoxy Sealed (Standard)	
			Hermetically Sealed (Option with extra charge)	



# P/N:LBW-AM06-PAM-20G47G-24

Широкополосный усилитель мощности 20 ГГц — 47 ГГц

## Absolute Maximum Ratings

Operating Voltage	+28V
RF Input Power (RFIN)	0dBm

## Biasing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +24V biasing

## Power OFF Procedure

Step 1	Turn off +24V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

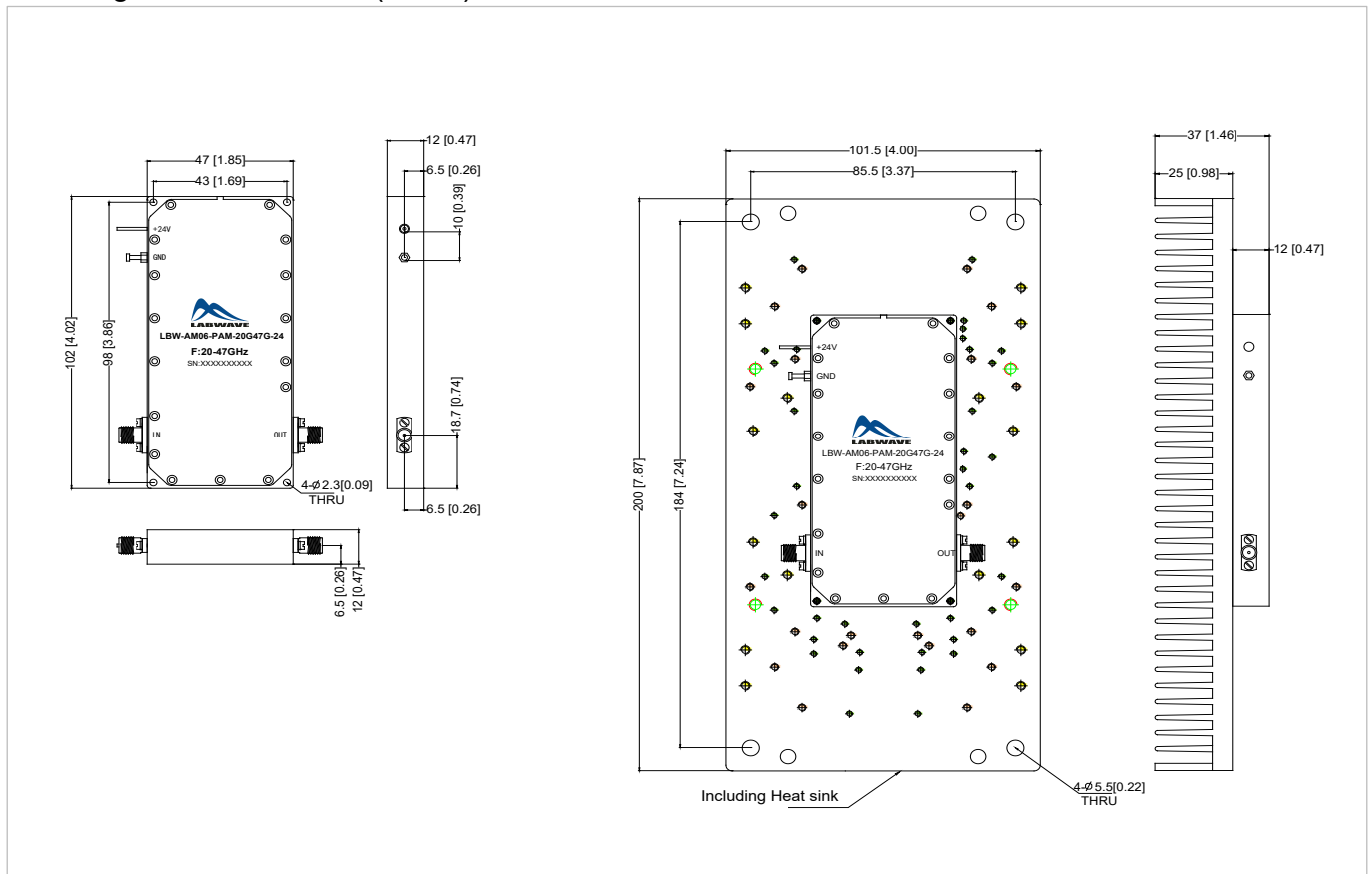
## Environmental Specifications

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

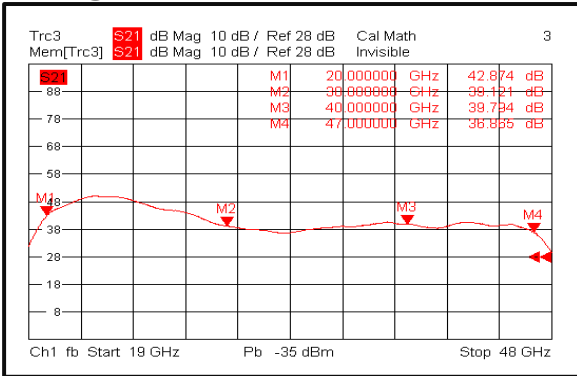
## Outline Drawing:

All Dimensions in mm (inches)  
Housing Tolerances  $\pm 0.2(0.008)$

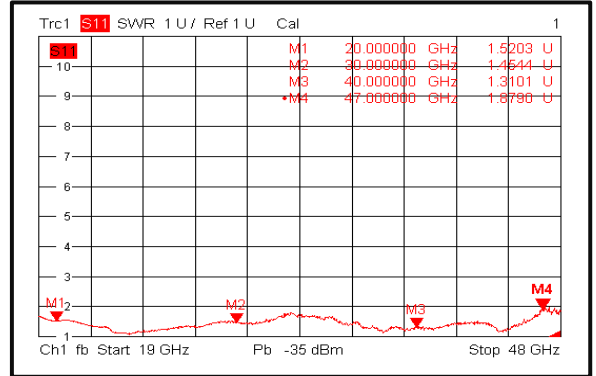
Heat Sink required during operation(Sold Separately)



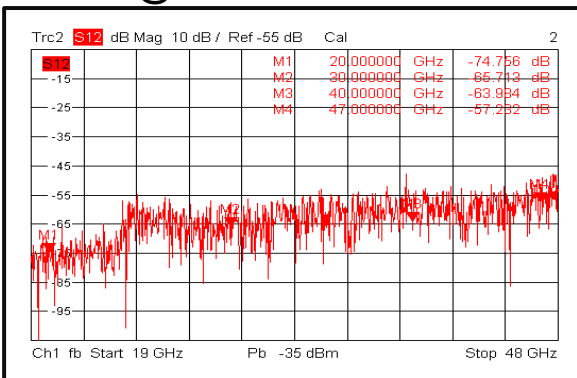
### Gain@+25°C



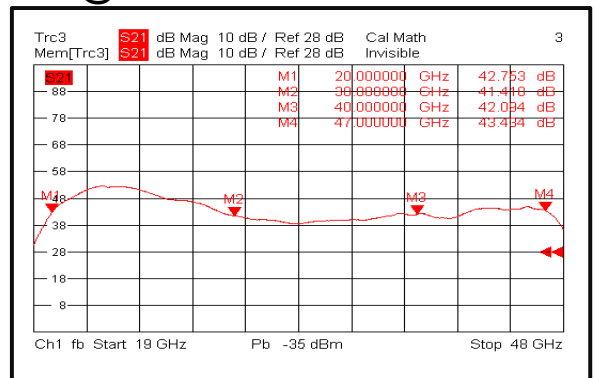
### Input VSWR@+25°C



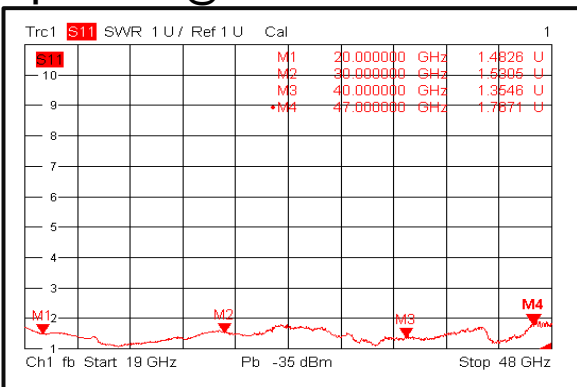
### Isolation@+25°C



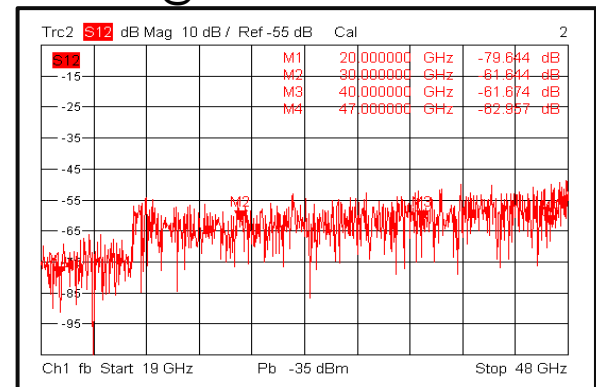
### Gain@-40°C



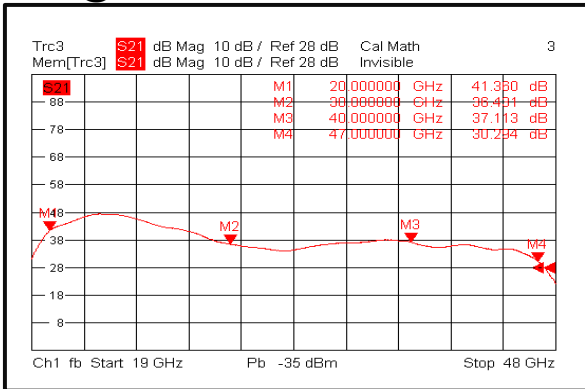
### Input VSWR@-40°C



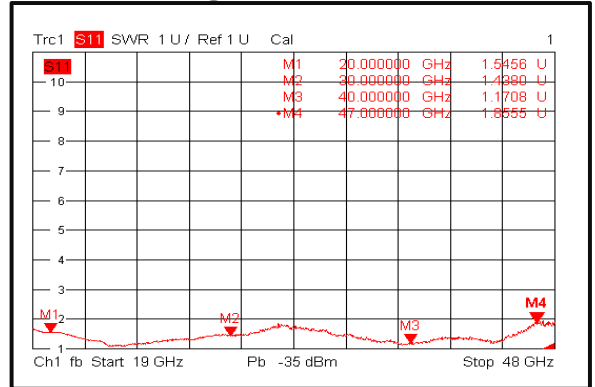
### Isolation @-40°C



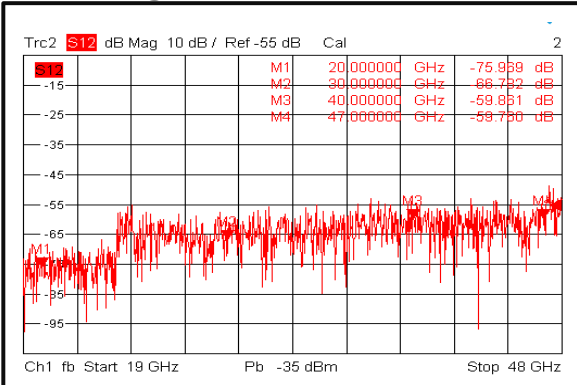
### Gain@+85°C



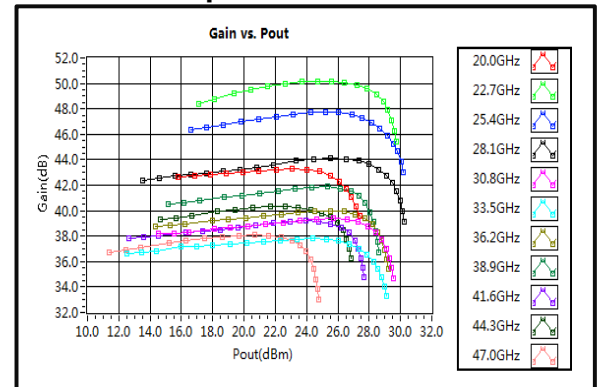
### Input VSWR@+85°C



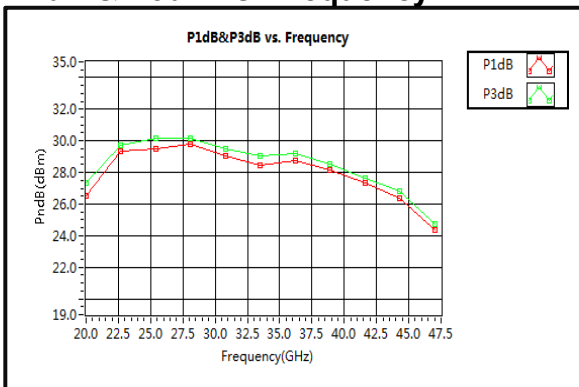
### Isolation@+85°C



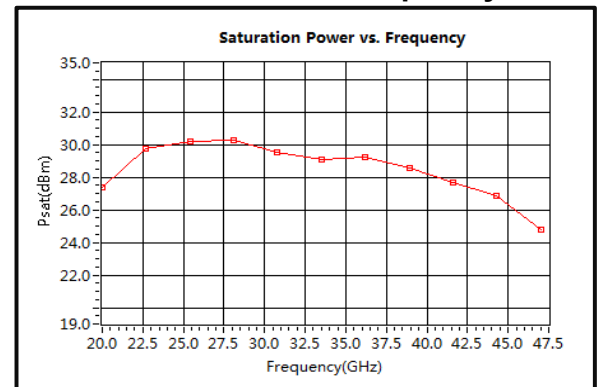
### Gain vs. Output Power



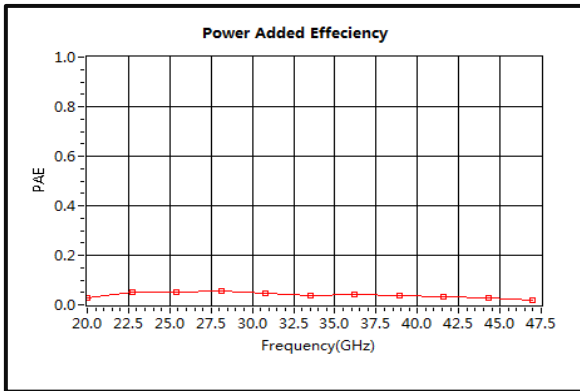
### P1dB & P3dB vs. Frequency



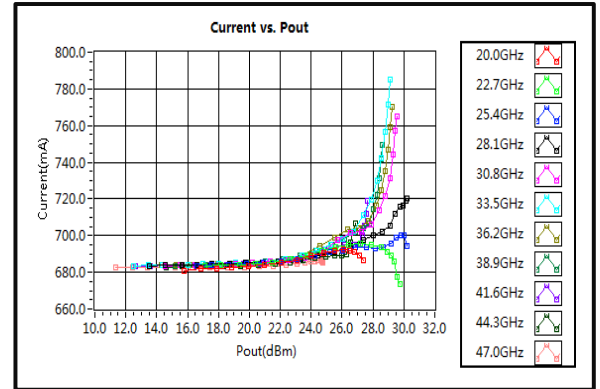
### Saturation Power vs. Frequency



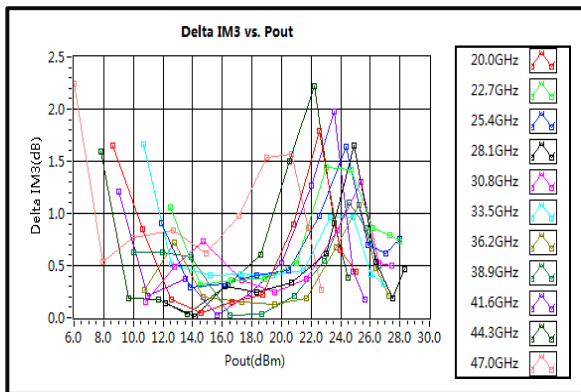
### Power Added Efficiency



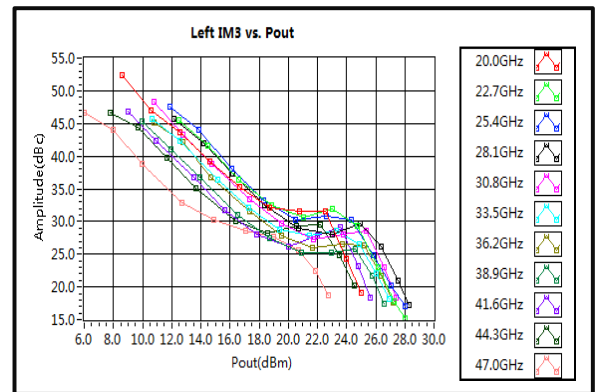
### Current vs. Pout



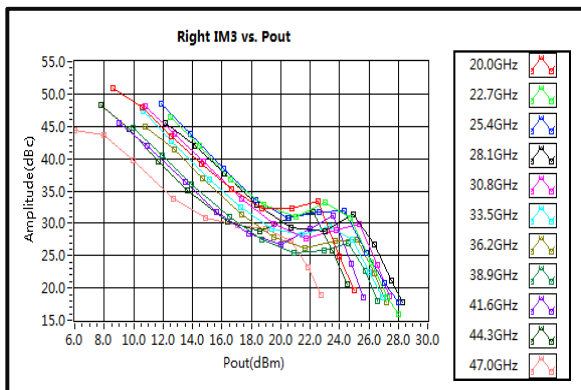
### Delta IM3 vs. Pout



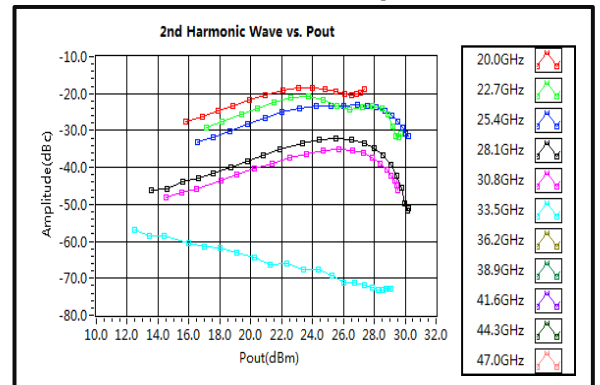
### Left IM3 vs. Pout



### Right IM3 vs. Pout



### 2nd Harmonic Wave Output Power



### 3rd Harmonic Wave Output Power

