

### Характеристики:

- Коэффициент усиления: 45 дБ (тип.)
- Шум: 3,0 дБ (тип.)
- Выходная мощность по уровню 1 дБ компрессии: +22 дБм (тип.)
- Напряжение питания: +12 В



### Области применения:

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

| Parameter                                     | Min. | Typ.  | Max. | Min. | Typ. | Max. | Units |
|---|------|-------|------|------|------|------|-------|
| Frequency Range                               | 26   |       | 40   | 20   |      | 43.5 | GHz   |
| Gain  | 35   | 42    |      | 30   | 40   |      | dB    |
| Gain Flatness                                 |      | ±3.0  |      |      | ±7.0 |      | dB    |
| Gain Variation Over Temperature (-40°C~+85°C) |      | ±1.25 |      |      | ±1.5 |      | dB    |
| Noise Figure                                  |      | 3.0   |      |      | 3.5  |      | dB    |
| Input VSWR                                    |      | 1.8   |      |      | 2.0  |      | : 1   |
| Output VSWR                                   |      | 1.8   |      |      | 2.0  |      | : 1   |
| Output 1dB Compression Point (P1dB)           | 18   | 22    |      | 12   | 21   |      | dBm   |
| Saturated Output Power (Psat)                 |      | 23.5  |      |      | 23.5 |      | dBm   |
| Output Third Order Intercept (OIP3)           |      | 25    |      |      | 25   |      | dBm   |
| Supply Current (Idd) (Vcc=+12V)               |      | 280   | 350  |      | 280  | 350  | mA    |
| Isolation S12                                 |      | -55   |      |      | -55  |      | dB    |

|                          |                  |                 |  |
|--------------------------|------------------|-----------------|--|
| Weight                   | 1.5 (Max.)ounces | Impedance       | 50ohms   |
| Input /Output Connectors | 2.92mm-Female    | Material        | Aluminum                                       |
| Finish                   | Gold Plated      | Package Sealing | Epoxy Sealed (Standard)                        |
|                          |                  |                 | Hermetically Sealed (Option with extra charge) |

## Малошумящий усилитель 20 ГГц — 43,5 ГГц

### Absolute Maximum Ratings

|                       |       |
|-----------------------|-------|
| Operating Voltage     | +15V  |
| RF Input Power (RFIN) | -1dBm |

### Biassing 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

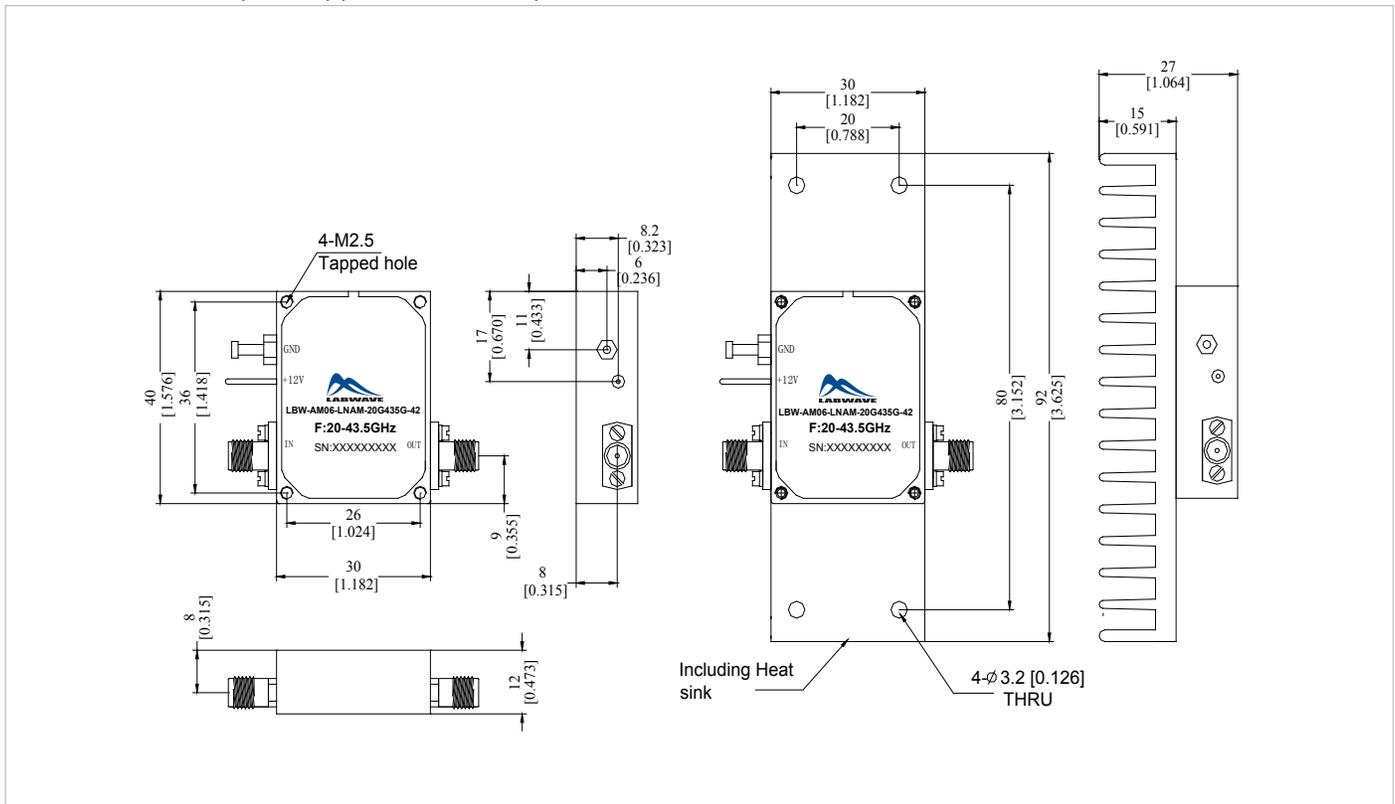
|                         |  |
|-------------------------|--|
| Operational Temperature | -40°C~+85°C  |
| Storage Temperature     | -50°C~+105°C   |
| Altitude                | 30,000 ft. (Epoxy Sealed Controlled environment)                                 |
|                         | 60,000 ft. 1.0psi 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)

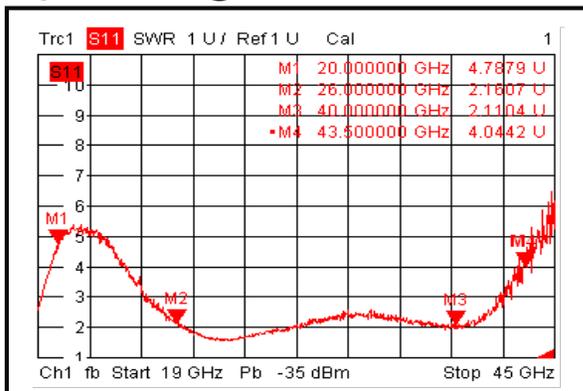
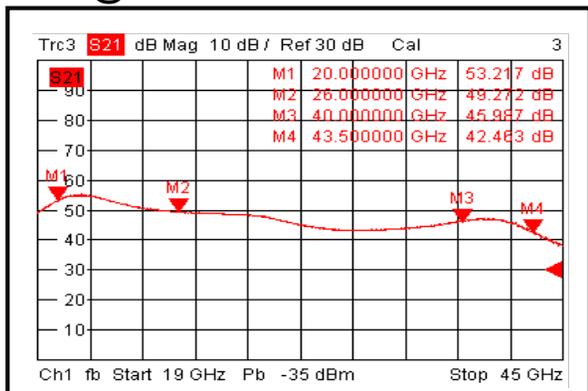
Tolerances  $\pm 0.1(0.004)$ (Excl heatsink)

Heat Sink required during operation(Sold Separately)

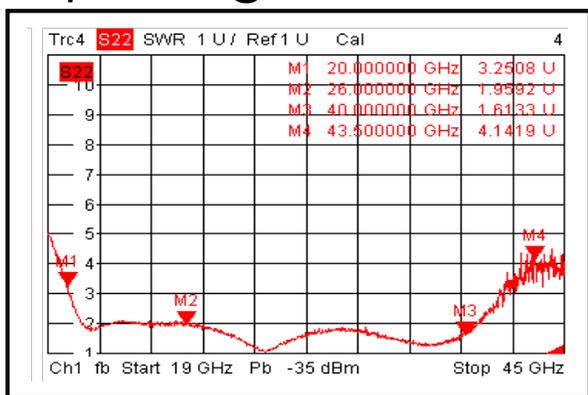


## Малошумящий усилитель 20 ГГц — 43,5 ГГц Input VSWR @+25°C

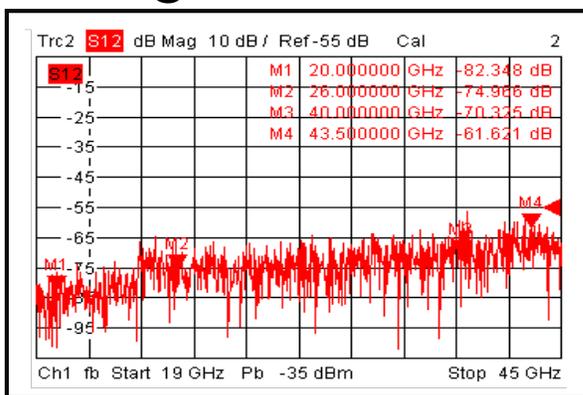
### Gain @+25°C



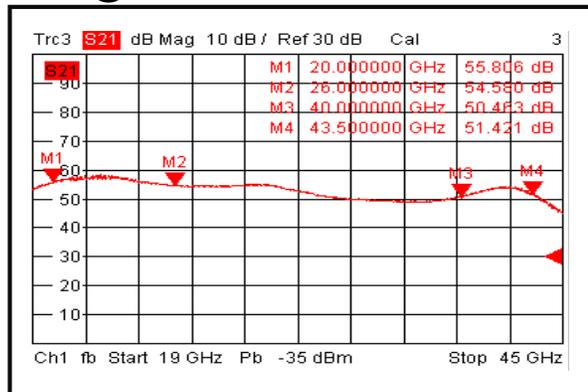
### Output VSWR @+25°C



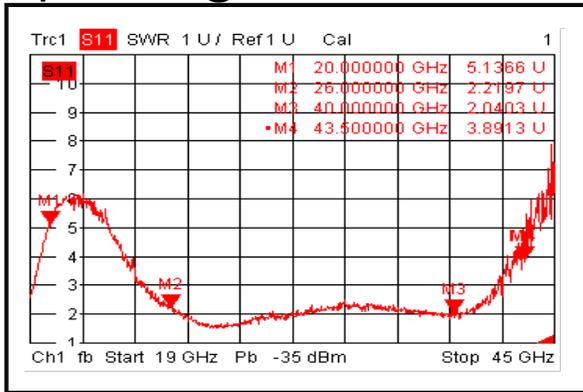
### Isolation @+25°C



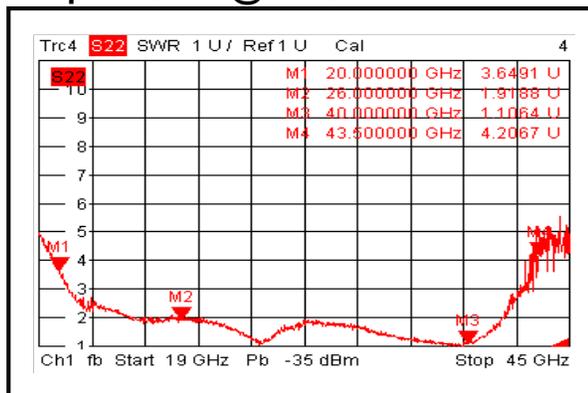
### Gain @-40°C



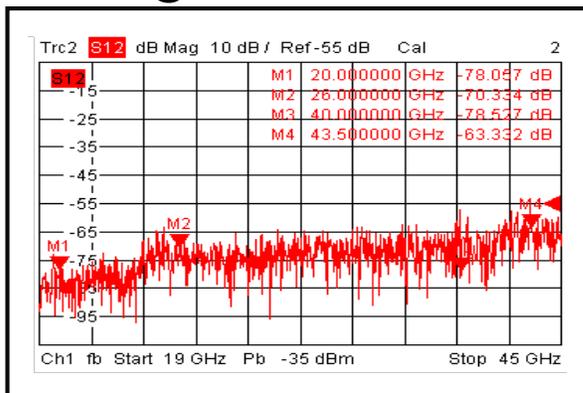
### Input VSWR @-40°C



### Output VSWR @-40°C

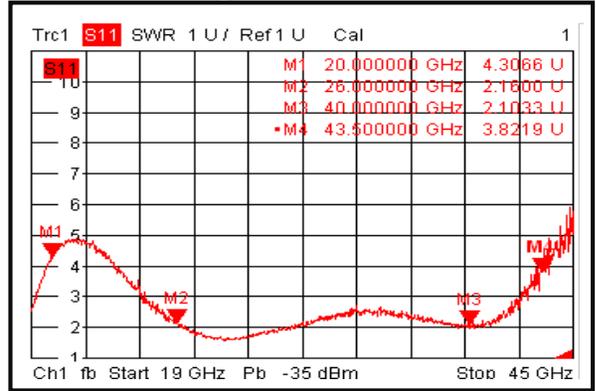
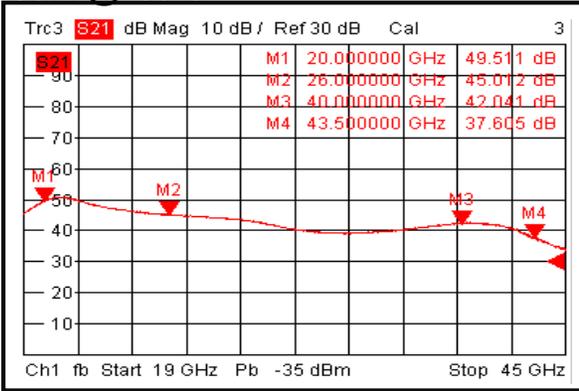


### Isolation @-40°C

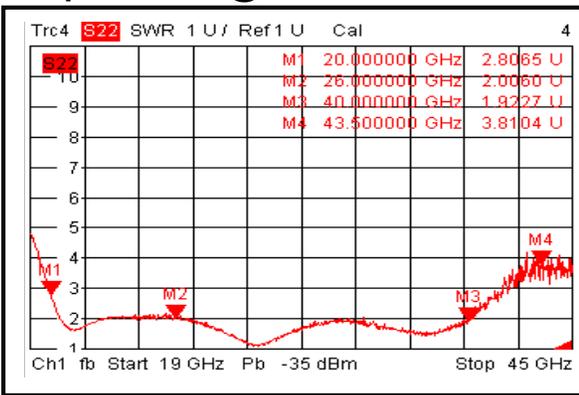


## Малошумящий усилитель 20 ГГц — 43,5 ГГц Input VSWR @+85°C

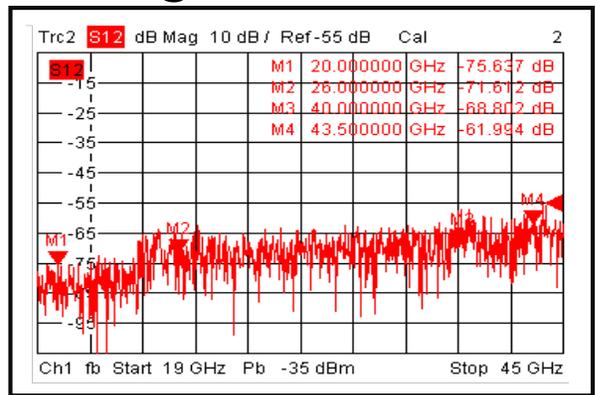
### Gain @+85°C



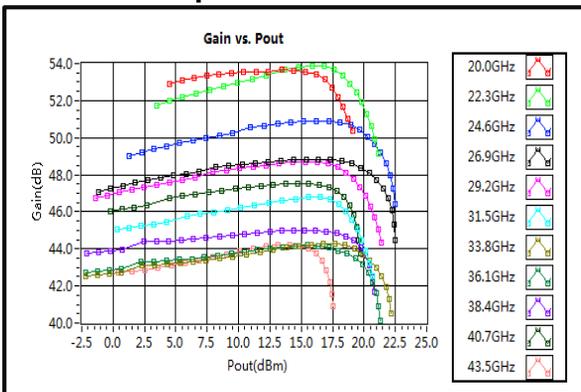
### Output VSWR @+85°C



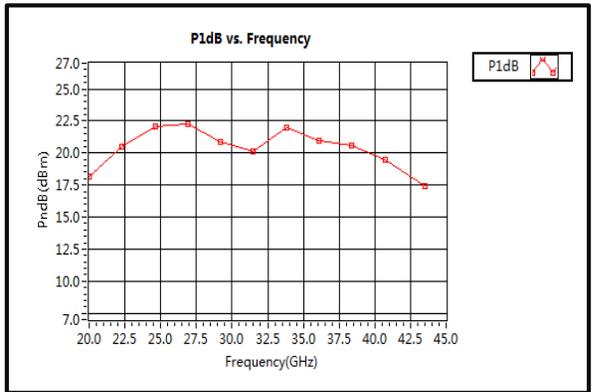
### Isolation @+85°C



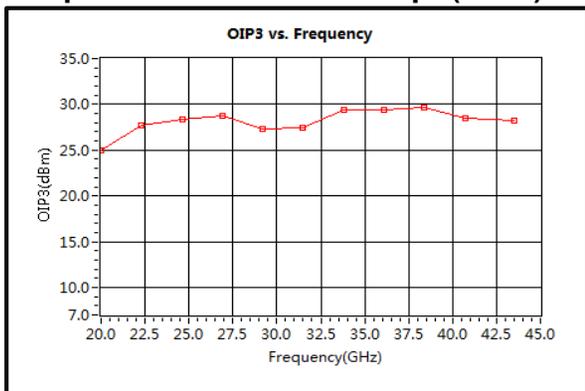
### Gain vs. Output Power



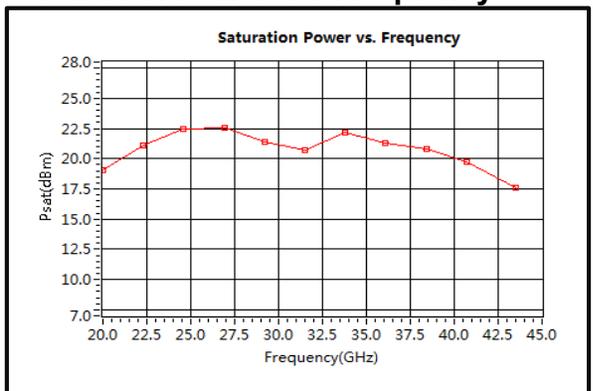
### P1dB vs. Frequency



### Output Third Order Intercept (OIP3)



### Saturation Power vs. Frequency

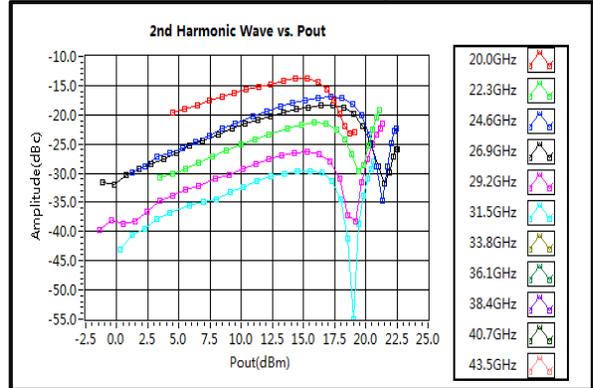


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Noise Figure



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power

