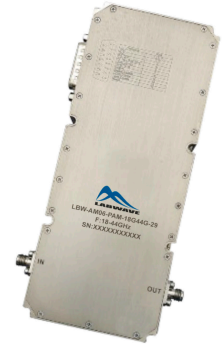


### Характеристики:

- Коэффициент усиления: 50 дБ (тип.)
- Выходная мощность насыщения: 30 дБм (тип.)
- Напряжение питания: +28 В постоянного тока
- Согласованный вход/выход 50 Ом
- Защита от перенапряжения
- Защита от перегрузки по току



### Области применения:

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

Parameter	Min.	Typ.	Max.	Units
Frequency Range	18		44	GHz
Small Signal Gain		42		dB
Gain Flatness		±4.0		dB
Gain Variation Over Temperature (-40°C to +85°C)		±4.0		dB
Input Return Loss		11		dB
Output 1dB Compression Point (P1dB)		29		dBm
Saturated Output Power (Psat)*	29	32		dBm
RF ON/OFF Speed (IDQ on)		50		ns
Isolation S12		-55		dB
Supply Current (Vcc=+28V)		3.5		A
Power Added Efficiency (PAE)		10		%
Time Division Duplexing (TDD) Blanking	ON		300	us
	OFF		300	us

Weight	Net	--- Max. ounces	Impedance	50ohms
	Including Heat sink	--- Max. ounces		
Input / Output Connectors	2.92mm-Female		Material	Copper
Finish	Nickel Plated		Package Sealing	Epoxy Sealed (Standard)
				Hermetically Sealed (Optional)

\* Psat at 43.5-44GHz: 28dBm Minimum.

## Широкополосный усилитель мощности 18 ГГц — 44 ГГц

### Absolute Maximum Ratings

Operating Voltage	+30V
RF Input Power (RFIN)	Psat – Large Signal Gain

### Biassing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +28V biasing

### Power OFF Procedure

Step 1	Turn off +28V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

### Environmental Specifications

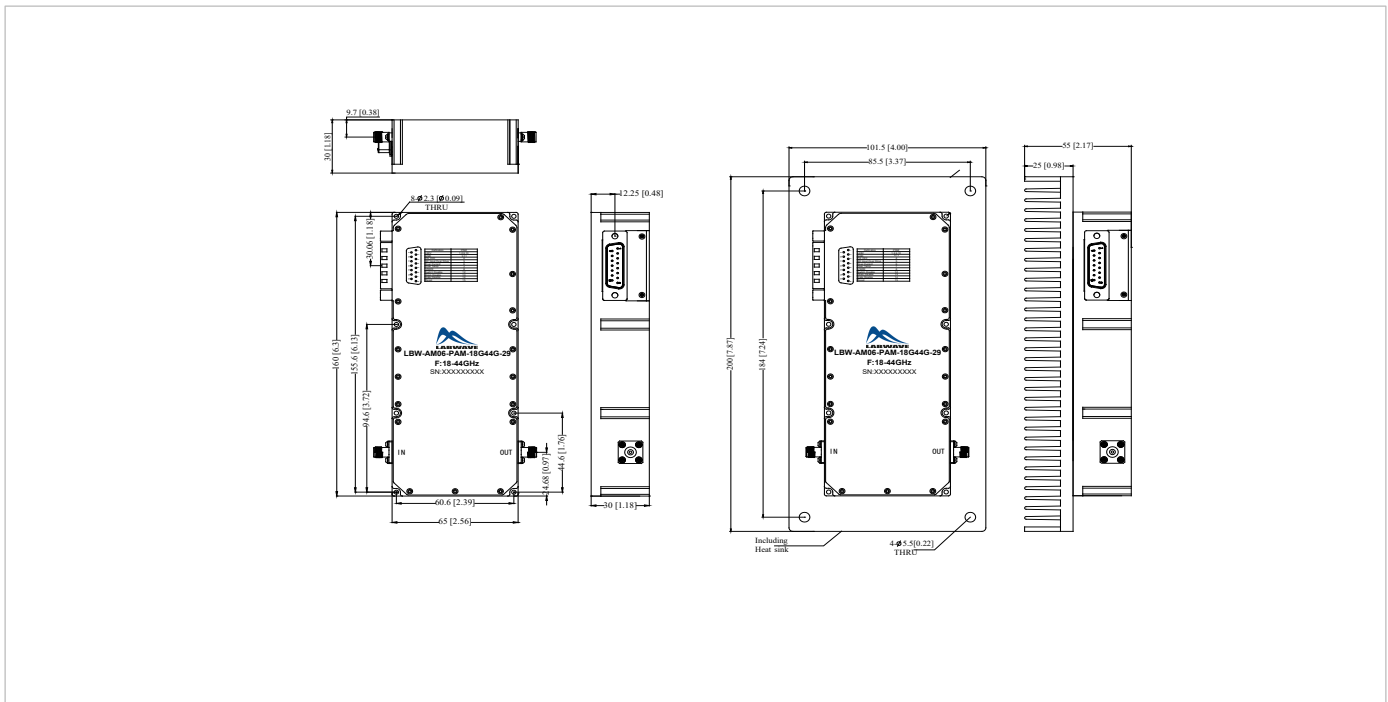
Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH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

\*Maximum RF input power is set to assure safety of amplifier. Input power may be increased at own risk to achieve full power of amplifier. Please reference gain and power curves.  
 \*\*For vibration testing details please see additional information section.

### Outline Drawing:

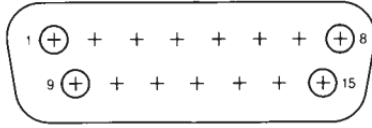
All Dimensions in mm (inches)  
 Housing Tolerances  $\pm 0.1$  (0.004)  
 (Excl Heat Sink)

DB15 cable is configured for power connection port by default  
 Heat Sink required during operation(Sold Separately)



## Широкополосный усилитель мощности 18 ГГц — 44 ГГц

### Interface Connector

<p>Male D-Sub is on the housing The mating Female part number: 172-E15-203R001</p>					
PIN #	NAME	FUNCTION	Initial State	Description	Applied
1,2,9,10	VDD	Power Supply	+28V	+28V DC is supply Voltage	Yes
3,11	GND	Ground	GND	Ground	Yes
4	PA_OFF	Indicator	LOW	Amplifier working state, high level is off	Yes
5	RF Input Over Drive	Indicator	LOW	Pin will be latched to logic HIGH when input signal is over limit	Yes
6	Over Current	Indicator	LOW	Pin will be latched to logic HIGH when drain current limit is reached	Yes
7	Over Temp	Indicator	LOW	Pin will be latched to logic HIGH when amplifier is driven over temperature	Yes
8	VSWR	Indicator	LOW	Pin will be latched to logic HIGH when output reflection is over limit	No
12	Switch Disable	Control	HIGH	Applying logic LOW disconnect RF signal of amplifiers	Yes
13	Drain Disable	Control	HIGH	Applying logic LOW disable drains of amplifiers	Yes
14	Gate Disable	Control	HIGH	Applying logic LOW disable gates of amplifiers	Yes
15	Reset	Control	HIGH	Resets PA when logic LOW is applied and released	Yes

**Notes:**

- HIGH/LOW voltages are standard TTL signals 0.0V-0.8V = LOW. 2V-5V = HIGH. Input current is 10uA.
- Matching connector and cable will be shipped with the product.
- Applied=Yes means the feature is included. Applied=No means the feature is not included with this model.
- 5V reference supply can source 700mA.
- Indicator output signals can source 24mA.