

## Power Amplifier

1-12GHz/24dB Gain/26 dBm Psat

Model: TLPA1G12G-24-26-H

TLPA1G12G-24-26-H is a power amplifier with a typical small signal gain of 24 dB and a nominal Psat of 26 dBm across the frequency range of 1 to 12 GHz. The DC power requirement for the amplifier is +12 VDC/420 mA. The input and output port configuration offers coax adapter structure with SMA female.

### Features:

- Frequency range: 1-12GHz
- Gain: 24dB Typ
- Output Power Psat: 26dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	1		12	GHz
Small Signal Gain	22	24		dB
Noise Figure		3	4	dB
Output P1dB	25	25.5		dBm
OutputPsat		26		dBm
Input VSWR		2	2.4	:1
Output VSWR		2	2.4	:1
DC Voltage	+11	+12	+13	V DC
DC Supply Current		420		mA
Impedance		50		Ohms

## Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	44*36*12	mm

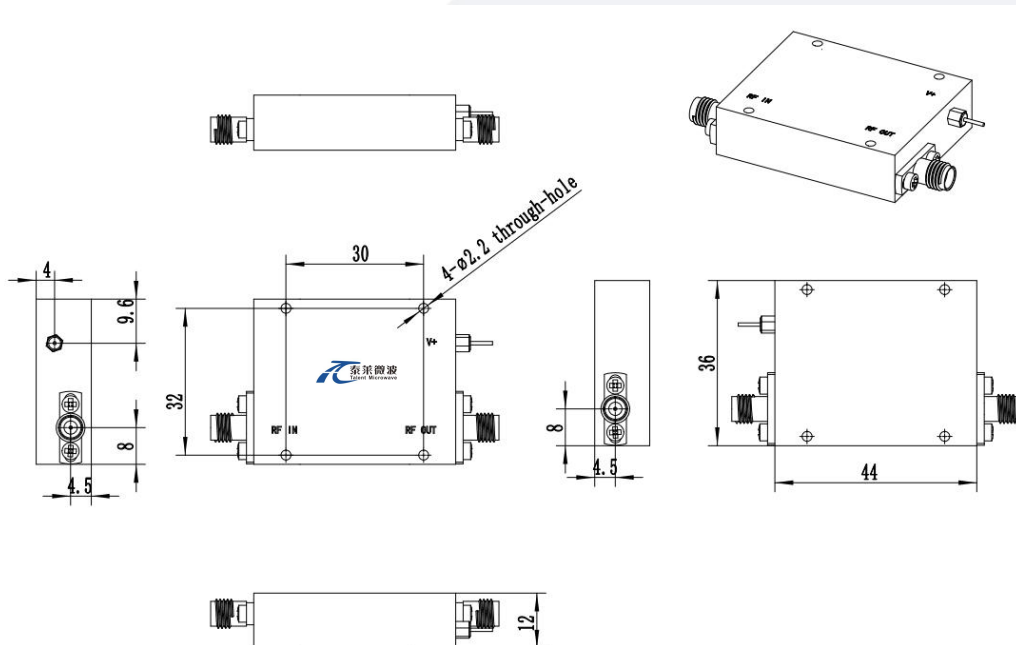
## Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+13 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



## Outline Drawing:

Unit:mm



**\*\*\*Heat Sink Required During Operation**



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

### Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-50		+70	°C
Relative humidity	95			%
Altitude	10,000			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			

\*Note: For a wider temperature range, please consult the manufacturer.

### Ordering Information:

Base Number	Description	Revision
TLPA1G12G-24-26-H	Power amplifier 1-12GHz, Gain:24dB,Psat:26dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA1G12G-24-26-H-HS	Power amplifier 1-12GHz, Gain:24dB,Psat:26dBm,+12V DC,With Heatsink	Rev.1.1