

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:

- Ultra Wide Band: 1-12 GHz
- 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
Output Psat		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:

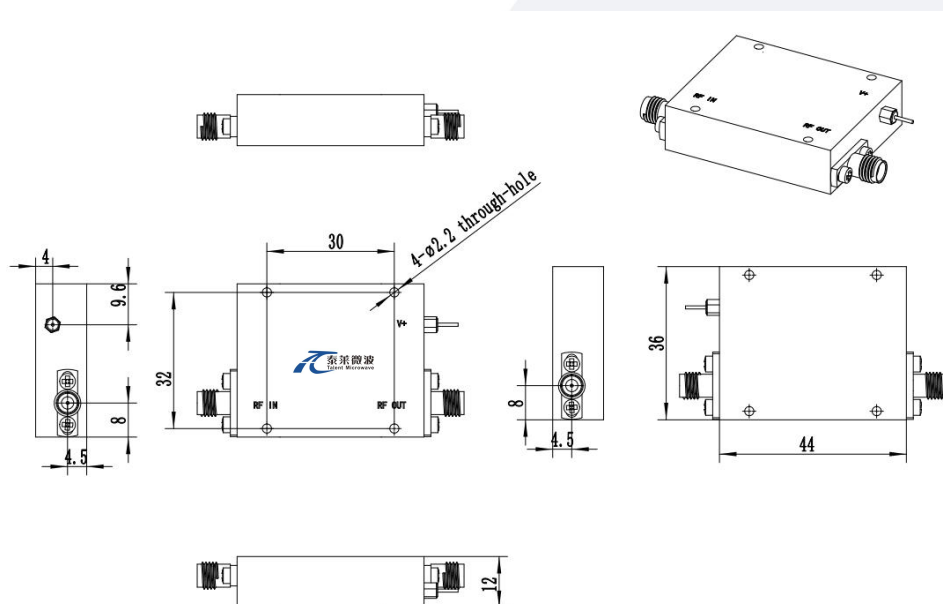
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	44*36*12	mm
Weight	/	g

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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

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