

## Power Amplifier

0.3-5GHz /25dB Gain/32dBm Psat

Model: TLPA0.3G5G-25-32

TLPA0.3G5G-25-32 is a power amplifier with a minimum small signal gain of 25 dB and a minimum Psat of 32 dBm across the frequency range of 0.3 to 5 GHz. The DC power requirement for the amplifier is +12 VDC/0.7 A. The input and output port configuration offers coax adapter structure with SMA female.

### Features:

- Frequency range: 0.3-5GHz
- Gain: 25dB Min
- Output Power Psat: 32dBm Min
- 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	0.3		5	GHz
Small Signal Gain	25			dB
Gain Flatness		±2.0		dB
Output P1dB		30		dBm
OutputPsat	32			dBm
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage	+9	+12	+15	V DC
DC Supply Current		0.7	0.9	A
Impedance		50		Ohms

## Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	30*50*12	mm

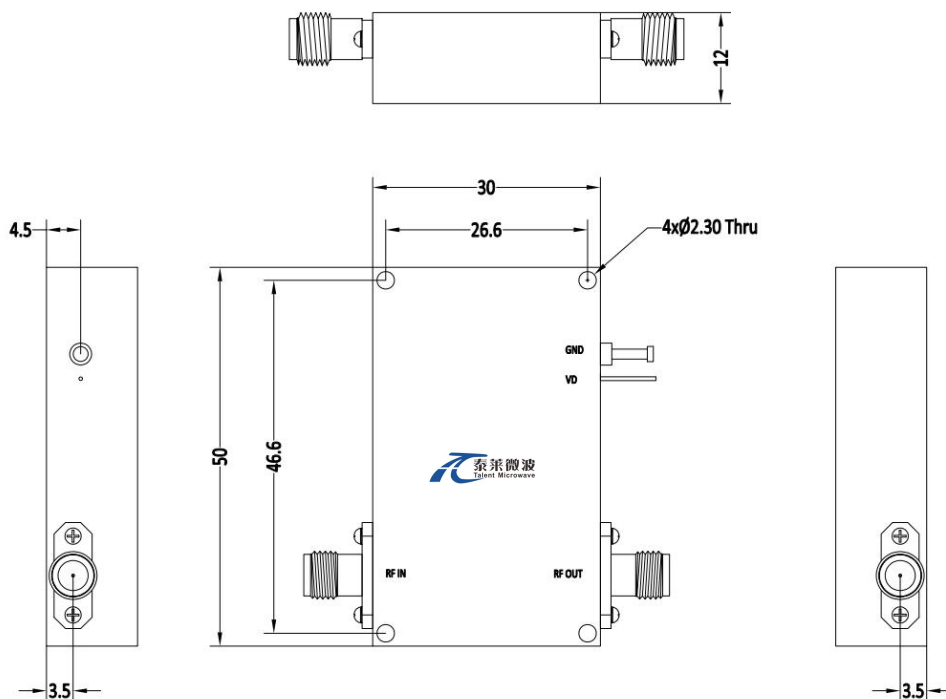
## Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+15 V
RF Input Power	+14 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	100%RH at 35°C, 95%RH at 40°C			%
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
TLPA0.3G5G-25-32	Power amplifier 0.3-5GHz, Gain:25dB,Psat:32dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA0.3G5G-25-32-HS	Power amplifier 0.3-5GHz, Gain:25dB,Psat:32dBm,+12V DC,With Heatsink	Rev.1.1