

## Power Amplifier

0.7-6GHz/30dB Gain/35dBm Psat

Model: TLPA0.7G6G-30-35

TLPA0.7G6G-30-35 is a power amplifier with a minimum gain of 30 dB and a nominal Psat of 35 dBm across the frequency range of 0.7 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/1 A. The input and output port configuration offers coax adapter structure with SMA female.

### Features:

- Frequency range: 0.7-6GHz
- Gain: 30dB Min
- Output Power Psat: 35dBm 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	0.7		6	GHz
Gain	30	33		dB
Gain Flatness		±2	±2.5	dB
Output P1dB	33	34		dBm
Output Psat		35		dBm
Spurious		-60		dBc
Input VSWR		1.6	2.0	:1
DC Voltage		+28		V DC
DC Supply Current		1		A
Impedance		50		Ohms

### Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	67*80*12	mm

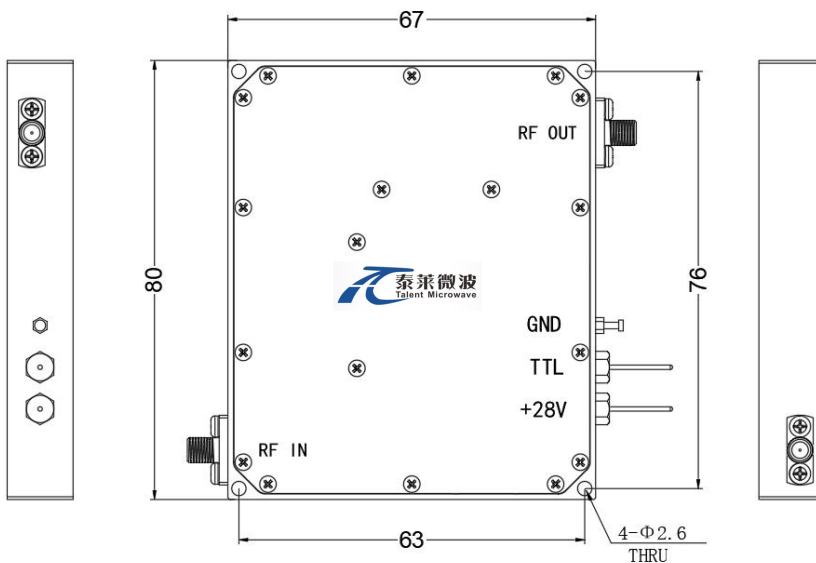
### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 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
TLPA0.7G6G-30-35	Power amplifier 0.7-6GHz, Gain:30dB,Psat:35dBm,+28V DC,Without Heatsink	Rev.1.2
TLPA0.7G6G-30-35-HS	Power amplifier 0.7-6GHz, Gain:30dB,Psat:35dBm,+28V DC,With Heatsink	Rev.1.2