

## Power Amplifier

1-6GHz/51dB Gain/51dBm Psat

Model: TLPA1G6G-57-51

TLPA1G6G-57-51 is a power amplifier with a minimum small signal gain of 51 dB and a minimum Psat of 51 dBm across the frequency range of 1 to 6 GHz. The DC power requirement for the amplifier is +28~30 VDC/20 A. The input and output port configuration offers coax adapter structure with SMA female.

### Features:

- Frequency range: 1-6GHz
- Gain: 51dB Min
- Output Power Psat: 51dBm 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	1		6	GHz
Small Signal Gain	51	54		dB
Gain Flatness		±2	±4	dB
Output P1dB	49	50		dBm
Output Psat	51	52		dBm
Harmonics		-13		dBc
Spurious		-60		dBc
Input VSWR		1.5	2.5	:1
DC Voltage	+28		+30	V DC
DC Supply Current		15	20	A
Impedance		50		Ohms

### Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Material	Aluminium	
Package Sealing	With air cooling	
Size	240*220*185	mm
Weight	4	Kg

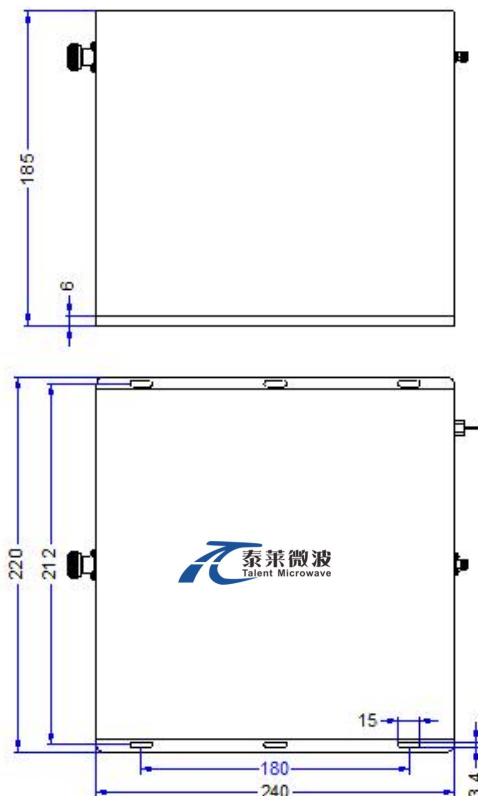
### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



### Outline Drawing:

Unit:mm



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

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

## Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°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
TLPA1G6G-57-51	Power amplifier 1-6GHz, Gain:51dB,Psat:51dBm,+28V DC,Without Heatsink	Rev.1.1
TLPA1G6G-57-51-HS	Power amplifier 1-6GHz, Gain:51dB,Psat:51dBm,+28V DC,With Heatsink	Rev.1.1