

Power Amplifier

0.5-6GHz/45dB Gain/45dBm Psat

Model: TLPA0.5G6G-45-45

TLPA0.5G6G-45-45 is a power amplifier with a minimum power gain of 45 dB and a minimum Psat of 45 dBm across the frequency range of 0.5 to 6 GHz. The DC power requirement for the amplifier is +36 VDC/6 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 0.5-6GHz
- Gain: 45dB Min
- Output Power Psat: 45dBm 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	0.5-6			GHz
Power Gain	45			dB
Gain Flatness		±3.5		dB
Output P1dB		37		dBm
Output Psat	45			dBm
Spurious@Pout=45dBm			-60	dBc
Harmonic@Pout=45dBm		-10		dBc
Input VSWR		1.5	2	:1
DC Voltage		36		V DC
DC Supply Current		6		A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Supply Connector	DSUB-7W2	
Size	200*100*23(Without heatsink) 200*100*69.5(With heatsink)	mm
Weight	1	Kg

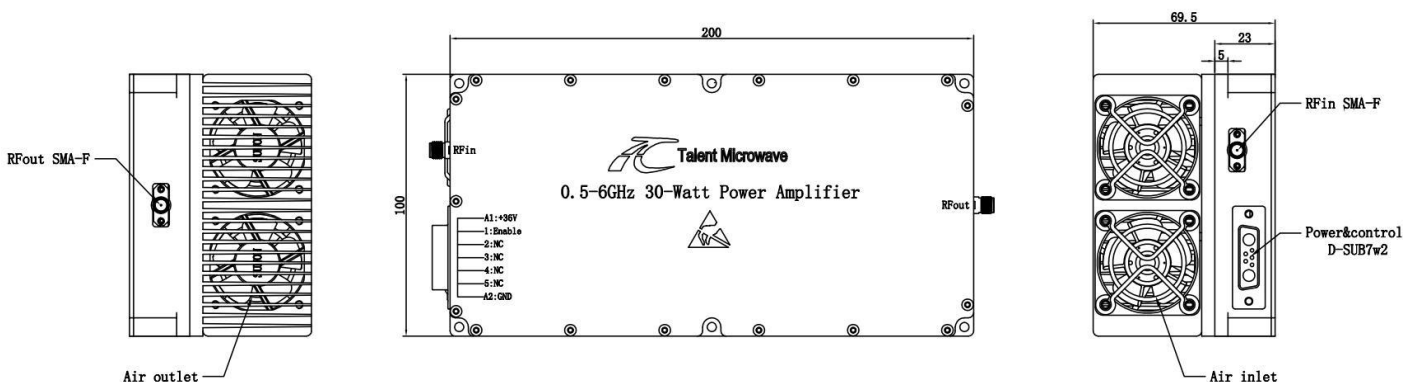
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+39 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

Regulatory Compliance:



*****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		+50	°C
Non-operating Temperature*	-50		+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
TLPA0.5G6G-45-45	Power amplifier 0.5-6GHz, Gain:45dB,Psat:45dBm,+36V DC,Without Heatsink	Rev.1.1
TLPA0.5G6G-45-45-HS	Power amplifier 0.5-6GHz, Gain:45dB,Psat:45dBm,+36V DC,With Heatsink	Rev.1.1