

## Power Amplifier

2.7-3.5GHz/53dB Gain/53dBm Psat

Model: TLPA2.7G3.5G-53-53

TLPA2.7G3.5G-53-53 is a power amplifier with a minimum power gain of 53 dB and a minimum Psat of 53 dBm across the frequency range of 2.7 to 3.5 GHz. The DC power requirement for the amplifier is +28 VDC/25 A. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

### Features:

- Frequency range: 2.7-3.5GHz
- Gain: 53dB Min
- Output Power Psat: 53dBm 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	2.7		3.5	GHz
Power Gain	53			dB
Gain Flatness		±3		dB
Output P1dB		50		dBm
Output Psat	53	54		dBm
Harmonic@Pout=53dBm			-20	dBc
Input VSWR		1.5	2.0	:1
DC Voltage	+26	+28	+30	V DC
DC Supply Current		25	30	A
Impedance		50		Ohms

### Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Bias	+28V	
Size	330*310*120	mm
Weight	20	Kg

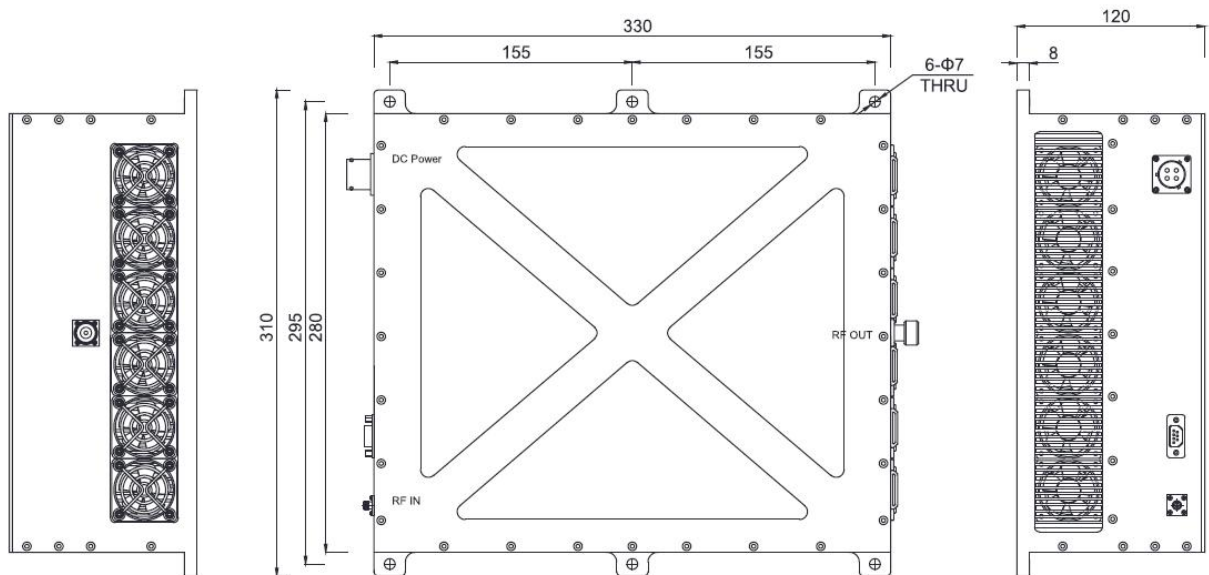
### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 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.

## Key Features:

Parameter	Specification
Over Temp Protection	55°C Max(Case)
Over Voltage Protection	32V Max
Over Current Protection	35A Max
Forward /Reverce Power Sense(analog Voltage)	
Current Sense(analog Voltage)	
Temp Sense (analog Voltage)	

## 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
TLPA2.7G3.5G-53-53	Power amplifier 2.7-3.5GHz, Gain:53dB,Psat:53dBm,+28V DC,With Heatsink	Rev.1.1