泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

1-6GHz/53dB Gain/53dBm Psat

Model: TLPA1G6G-53-53-V2

TLPA1G6G-53-53-V2 is a power amplifier with a minimum small signal gain of 53 dB and a minimum Psat of 53 dBm across the frequency range of 1 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/45 A. The input ports configuration offers coax adapter structure with SMA female and output ports configuration offers coax adapter structure with N female.

Features:

- Frequency range: 1-6GHz
- 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	1		6	GHz
Small Signal Gain	53	57		dB
Gain Flatness		±4	±5	dB
Output P1dB		47		dBm
Output Psat	53	53.5		dBm
Input VSWR		1.5	2	:1
DC Voltage	26	28	30	V DC
Static Current		3		A
Saturation current		45	50	A
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
Size	366*358*135.5	mm
Weight	≤8	Kg

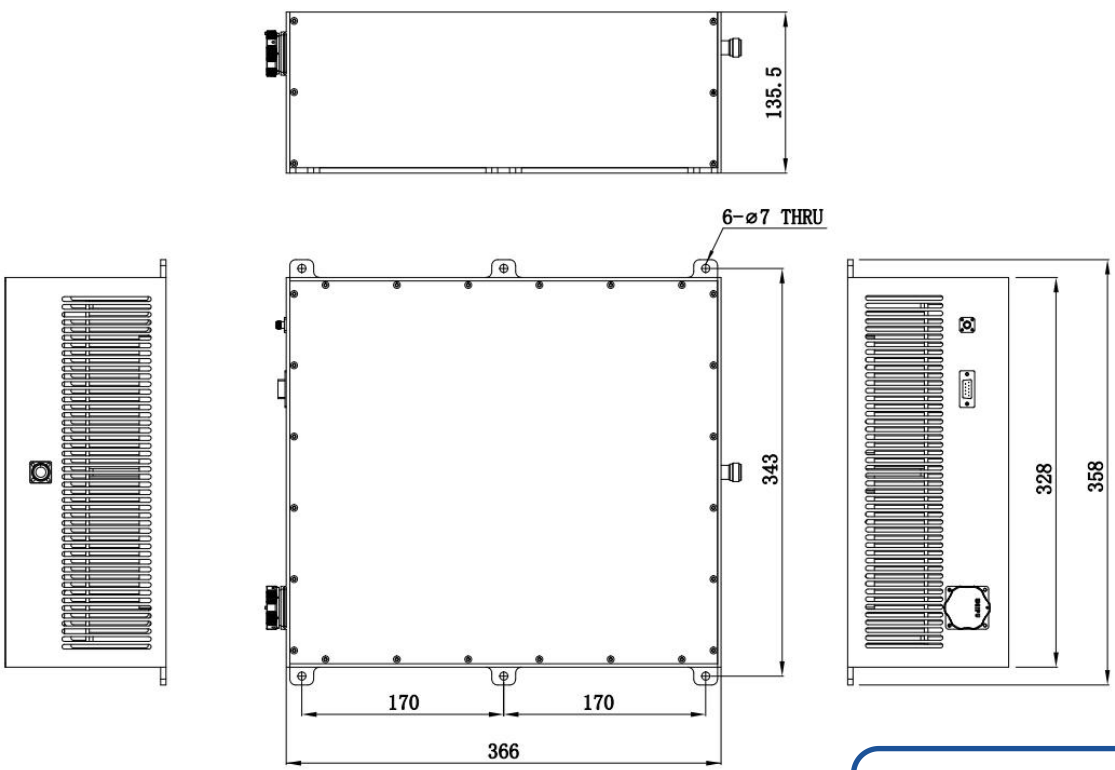
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+32 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Simple 220V System
Available SAC option

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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

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DC Supply Connector(WS28-Z-8 Female):

Pin	Name	Function
1~4	VCC	Power supply positive,+26.0-30.0VDC.
5~8	GND	Ground

Control Connector(DSUB-9 Female):

Pin	Name	Function
1	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground.
2	NC	Not connected
3	Over TEM	When the temperature of the case exceeds 75 ℃, the power amplifier will turn off and this pin will be pulled high(TTL=+5V). If the temperature of case drops to 70 ℃, the power amplifier will return to normal operation, and this pin will be pulled low(TTL=0V).
4	RESET	Resets PA when logic LOW is applied and released (Internally Pulled-High)
5	GND	Ground
6~9	NC	Not connected

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	℃
Non-operating Temperature*	-30		+60	℃
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-53-53-V2	Power amplifier 1-6GHz, Gain:53dB,Psat:53dBm,+28V DC,With Heatsink	Rev.1.0