泰莱微波
Talent Microwave

Suzhou Talent Microwave,Inc
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Power Amplifier

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

Model: TLPA1G6G-53-53-HS

TLPA1G6G-53-53-HS is a power amplifier with a power gain of 53 dB and a nominal Psat of 53 dBm across the frequency range of 1 to 6 GHz. The DC power requirement for the amplifier is +36 VDC/1900 W. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

Features:

- Ultra Wide Band: 1-6GHz
- Gain: 53dB Min
- Output Power Psat: 53 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output
- Over voltage protection.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range		1-6		GHz
Power Gain@Pout=53dBm	53			dB
Gain Flatness		±3		dB
Gain adjust Range		31.5		dB
Gain adjust Step		0.5		dB
Output Psat	53			dBm
Spurious@Pout=53dBm			-60	dBc
2nd Harmonics@Pout=53dBm			-10	dBc
Input VSWR			2	:1
Tolerate load VSWR			3	:1
DC Voltage		36		V DC
Power consumption			1900	W
Impedance		50		Ohms

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Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
Control Interface*	J30J-9ZKP	Pin1-6:0.5/1/2/4/8/16 Attenuation control bit Pin7~9:GND
DC Bias	D-SUB5W5	Pin1-2：+36V Pin3-5：GND
Size	364*330*97.5	mm
Weight	/	g

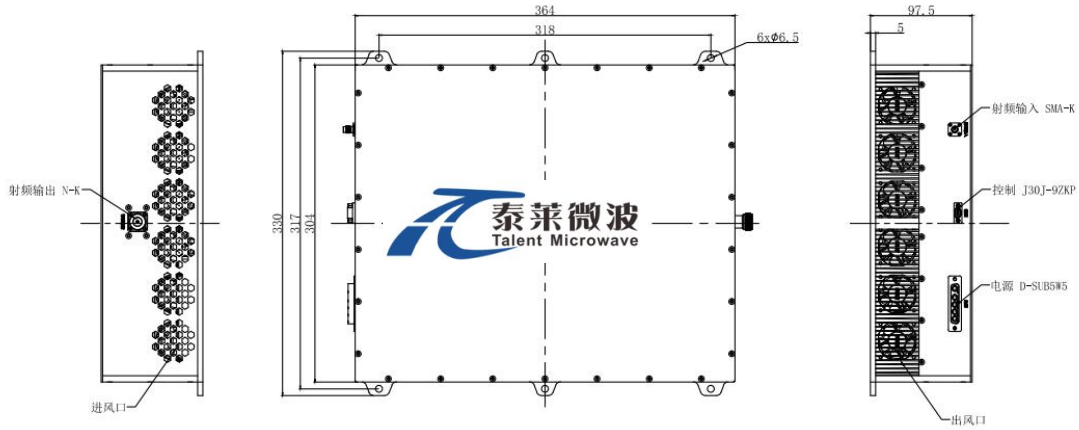
*Active high, inactive at low level or floating state.

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+37 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



***Heat Sink Required During Operation

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+40	℃
Non-operating Temperature*	-30		+50	℃
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	Desciption	Revision
TLPA1G6G-53-53-HS	Power amplifier 1-6GHz,Gain:53dB,Psat:53dBm, +36V DC,With Heatsink	Rev.1.1