Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Power Amplifier
10-14GHz/53dB Gain/53dBm Psat   Model: TLPA10G14G-53-53

TLPA10G14G-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 10 to 14 GHz. The DC power requirement for the amplifier is +24 VDC. The input port configuration offers coax adapter structure with N female and output port configuration offers WR75.

Features:
- Frequency range: 10-14GHz
- 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		10-14		GHz
Power Gain	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			-50	dBc
Harmonic@Pout=53dBm			-15	dBc
Input VSWR			2	:1
DC Voltage		24		V DC
Power Consumption			1600	W
Impedance		50		Ohms

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N Female/WR75	
DC Power Supply Connector	Y50DX-1404	
Control Connector	Y50X-1013	
Size	360*280*120	mm
Weight	≤15	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

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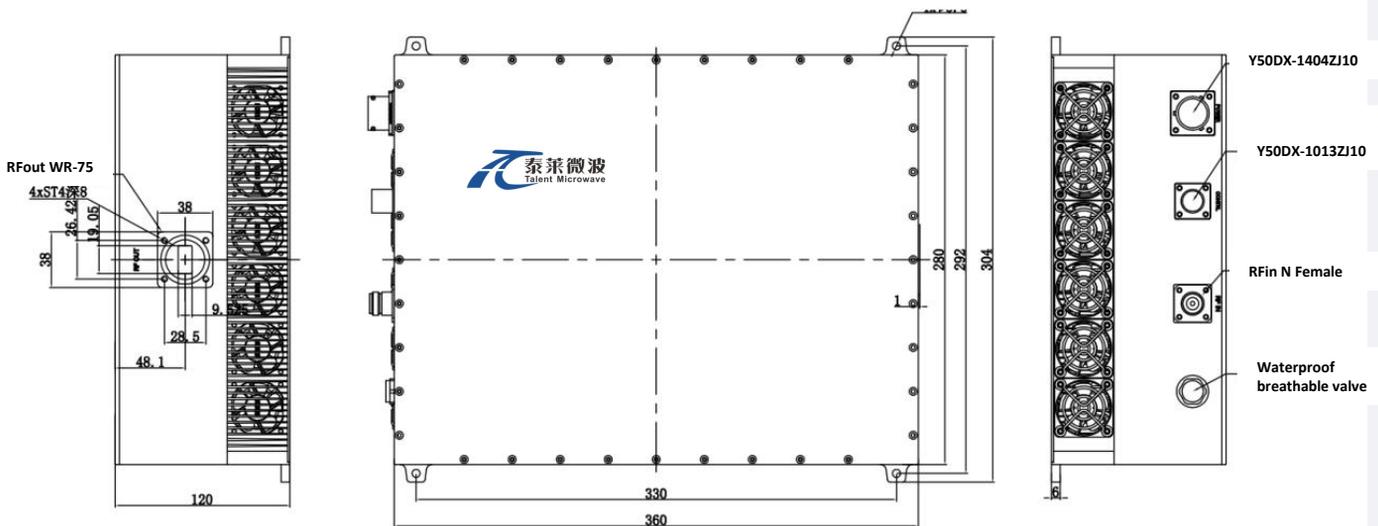
ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

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
TLPA10G14G-53-53	Power amplifier 10-14GHz, Gain:53dB,Psat:53dBm,+24V DC,Without Heatsink	Rev.1.1
TLPA10G14G-53-53-HS	Power amplifier 10-14GHz, Gain:53dB,Psat:53dBm,+24V DC,With Heatsink	Rev.1.1