

Power Amplifier

2-6GHz/50dB Gain/50dBm Psat

Model: TLPA2G6G-50-50

TLPA2G6G-50-50 is a power amplifier with a minimum power gain of 50 dB and a minimum Psat of 50 dBm across the frequency range of 2 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/800 W. 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: 2-6GHz
- Gain: 50dB Min
- Output Power Psat: 50dBm 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		6	GHz
Power Gain	50			dB
Gain Flatness		±3		dB
Output Psat	50			dBm
Spurious			-60	dBc
Harmonics		-10		dBc
Input VSWR			2.0	:1
DC Voltage		+28		V DC
Power Consumption			800	W
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Power Interface	Y50DX-1404	
Communication Interface	J30J-0ZKP	
Size	300*264*120	mm
Weight	10	Kg

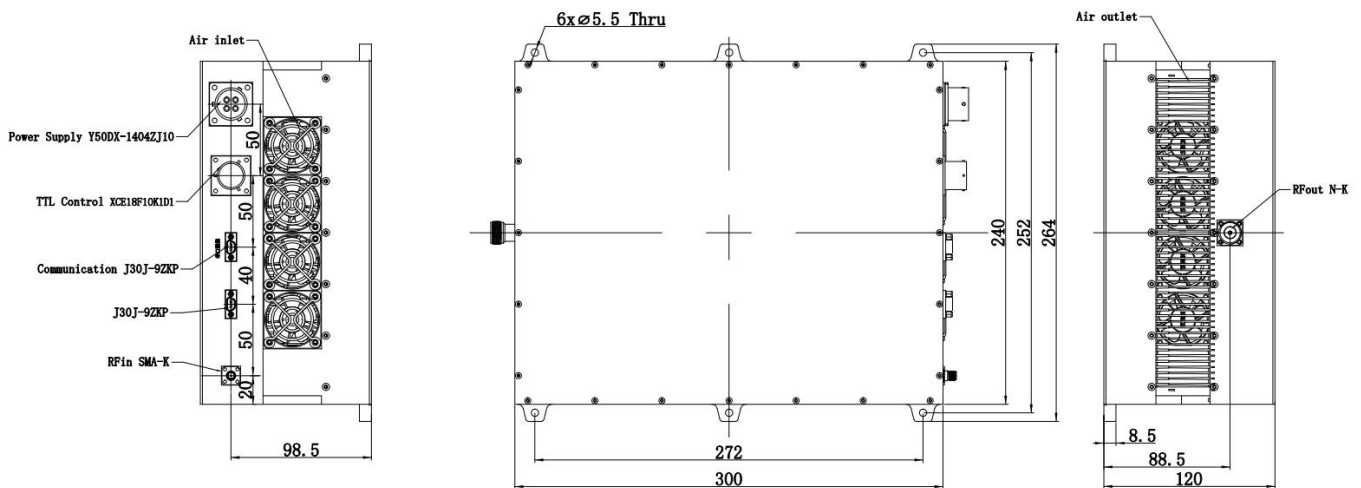
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 V
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.

Environmental Conditions:

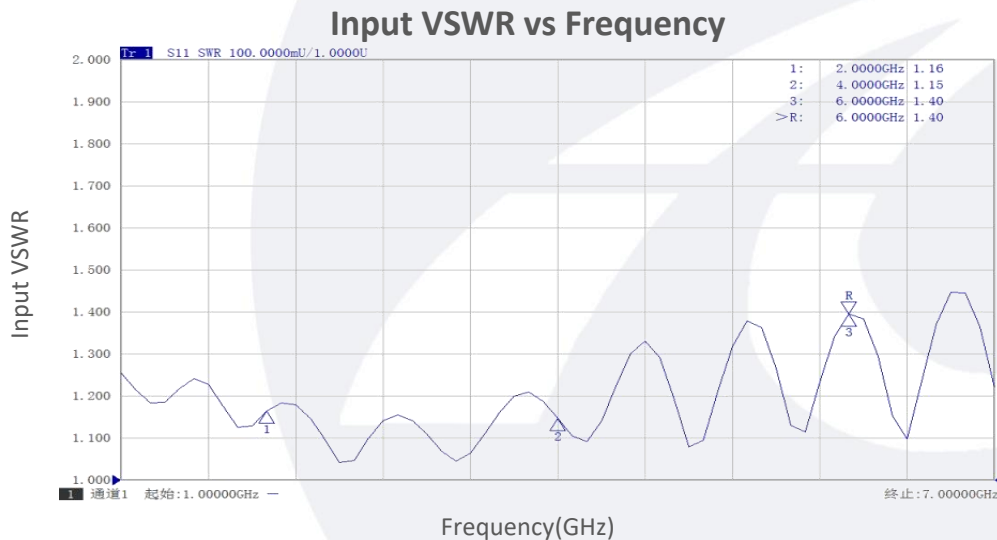
Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TLPA2G6G-50-50	Power amplifier 2-6GHz, Gain:50dB,Psat:50dBm,+28V DC,With Heatsink	Rev.1.1

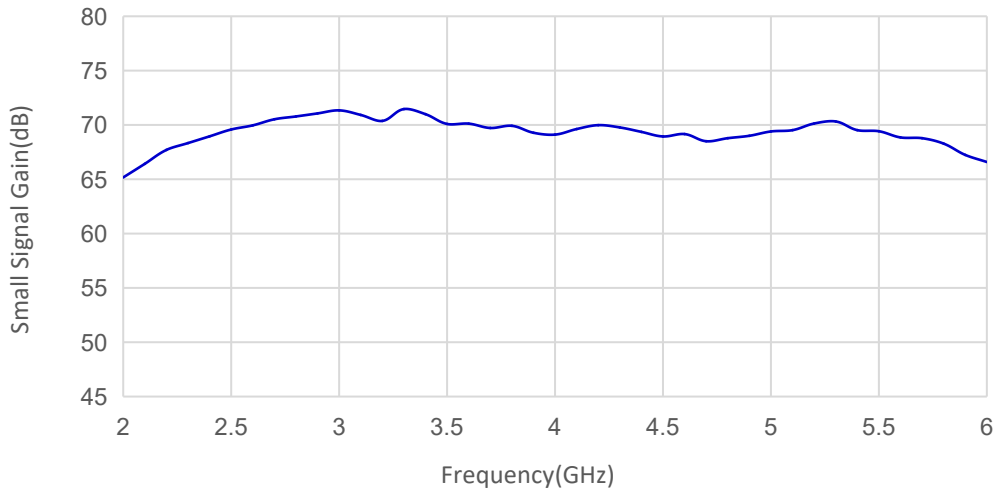
Typical Performance Data:



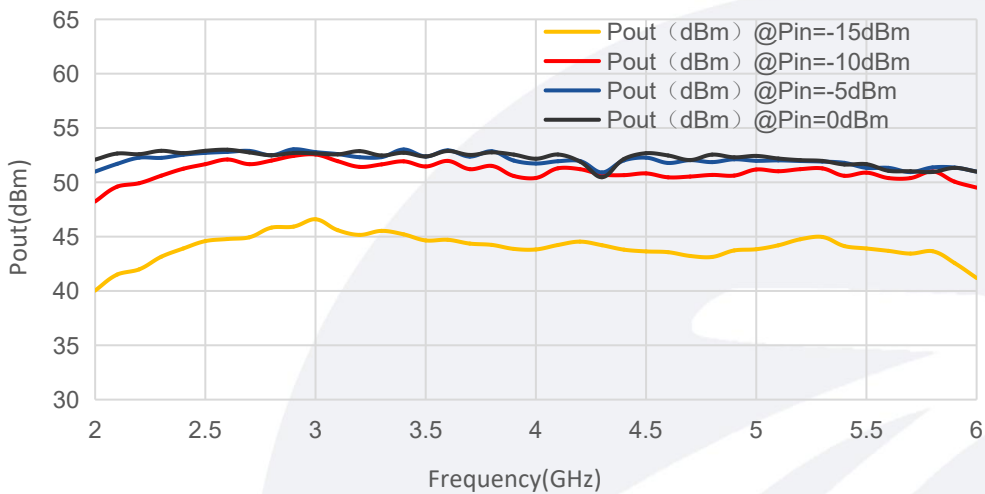
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

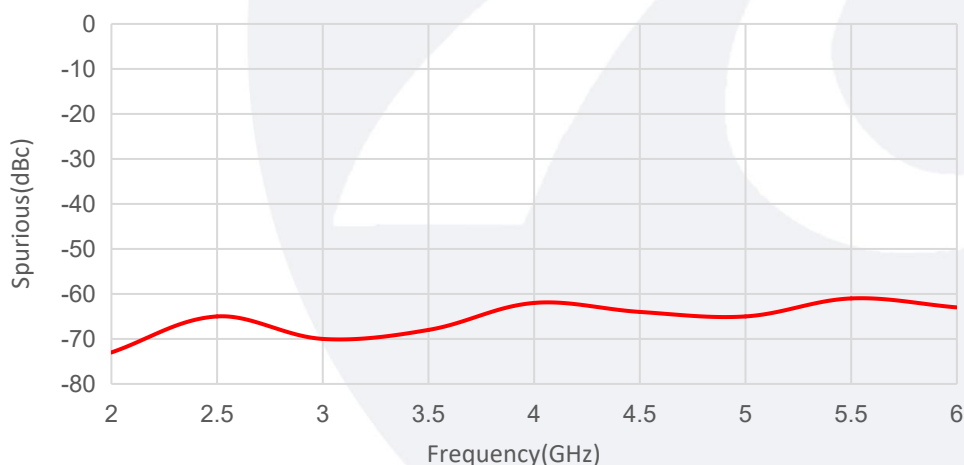
Small Signal Gain vs Frequency



Pout vs Frequency



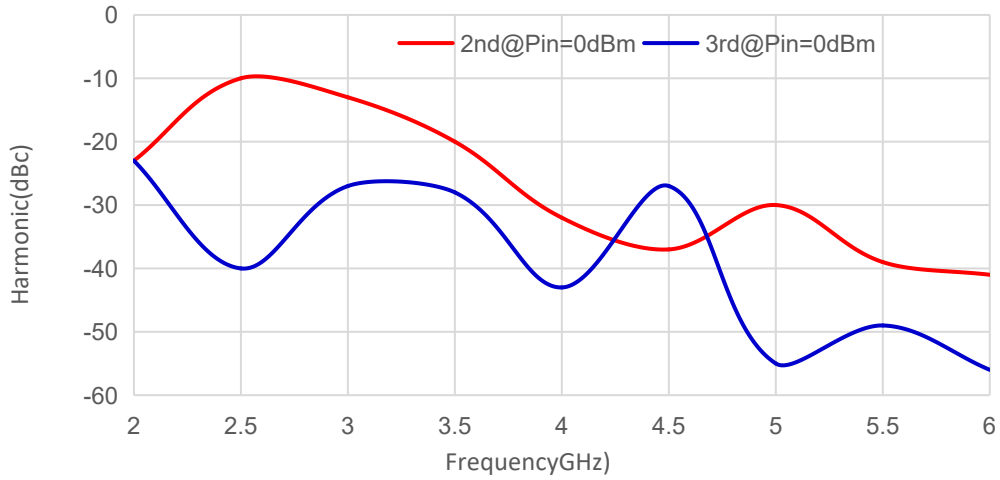
Spurious vs Frequency



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Typical Performance Data:

Harmonic vs Frequency



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