

Power Amplifier

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

Model: TLPA2G6G-50-50

TLPA2G6G-50-50 is a power amplifier with a typical small signal gain of 50 dB and a nominal Psat of 50 dBm across the frequency range of 2 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/800W. The input and output port configuration offers coax adapter structure with SMA Female/N Female.

Features:

- Ultra Wide Band: 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
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:

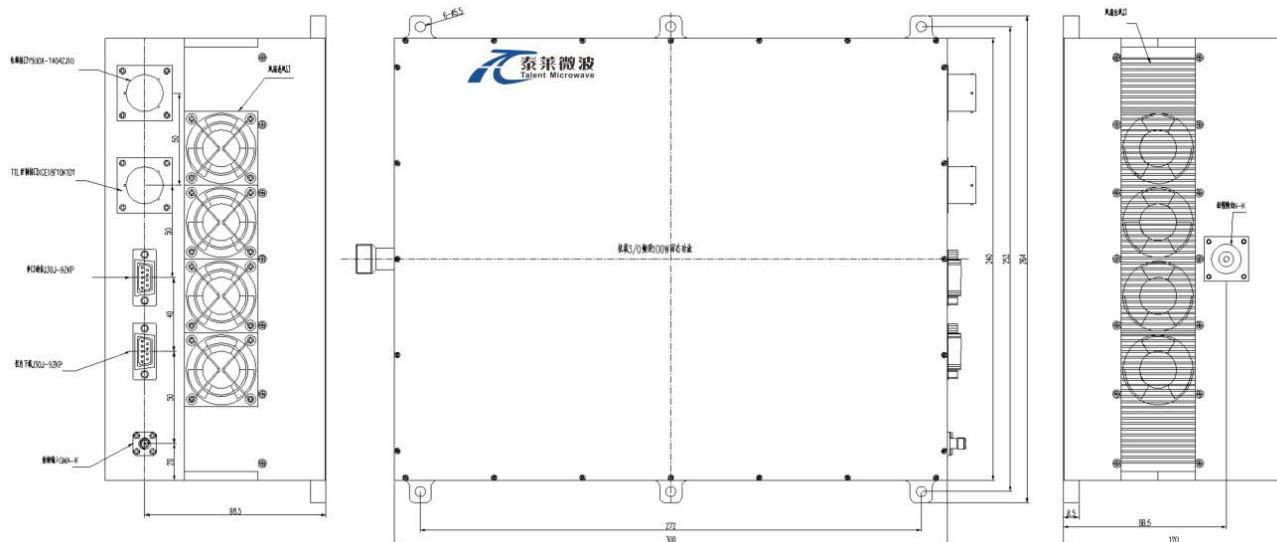
Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
DC Power Interface	Y50DX-1404	
Communication Interface	J30J-0ZKP	
Size	300*264*120	mm
Weight	10	Kg

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*	-40		+60	°C
Non-operating Temperature*	-45		+65	°C
Relative humidity		95		%
Altitude	50000			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			

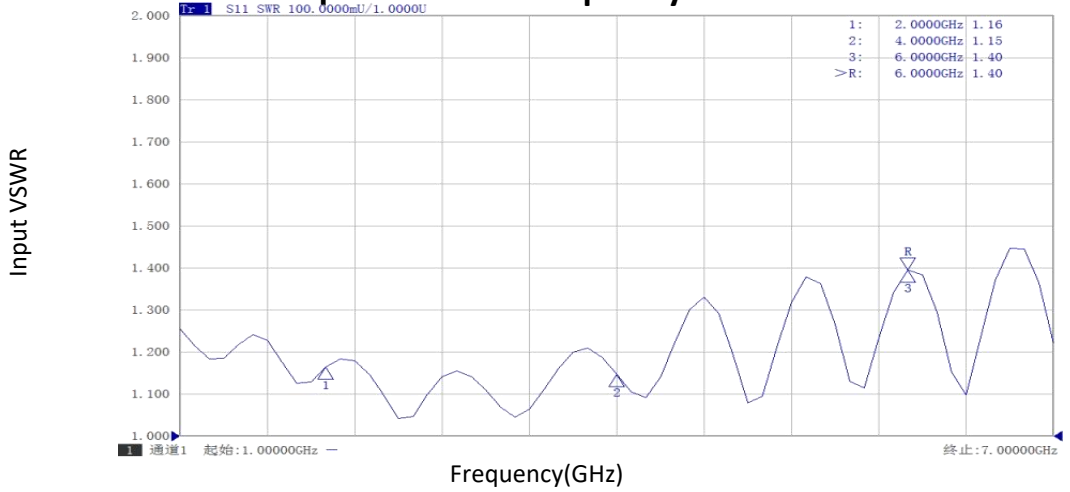
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

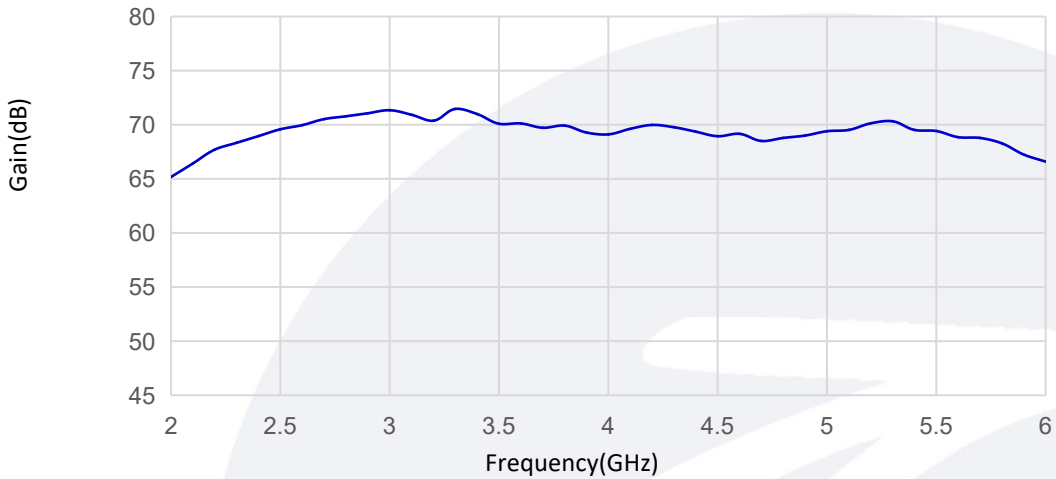
Base Number	Description	Revision
TLPA2G6G-50-50	Power amplifier 2-6GHz,Gain:50dB,Psat:50dBm,+28V DC,Built in Fan Cooling .	Rev.1.1

Typical Performance Data:

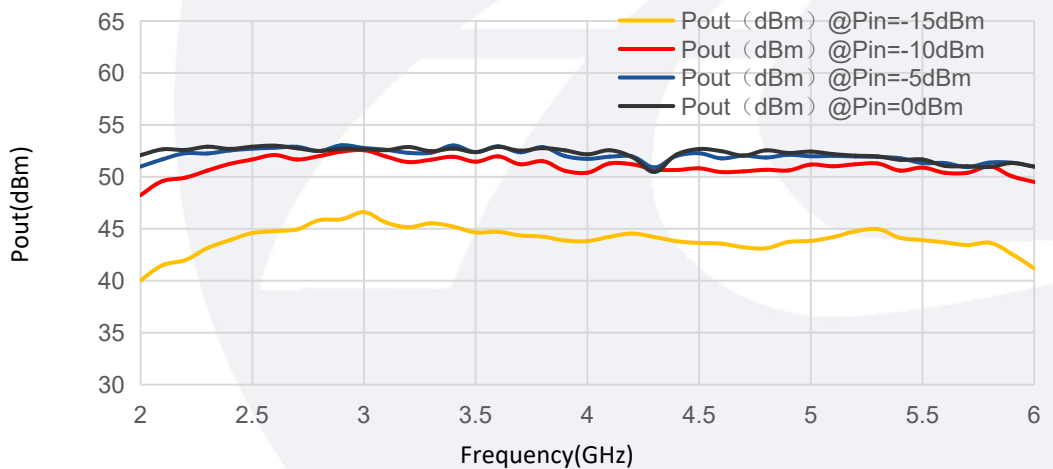
Input VSWR vs Frequency



Gain vs Frequency



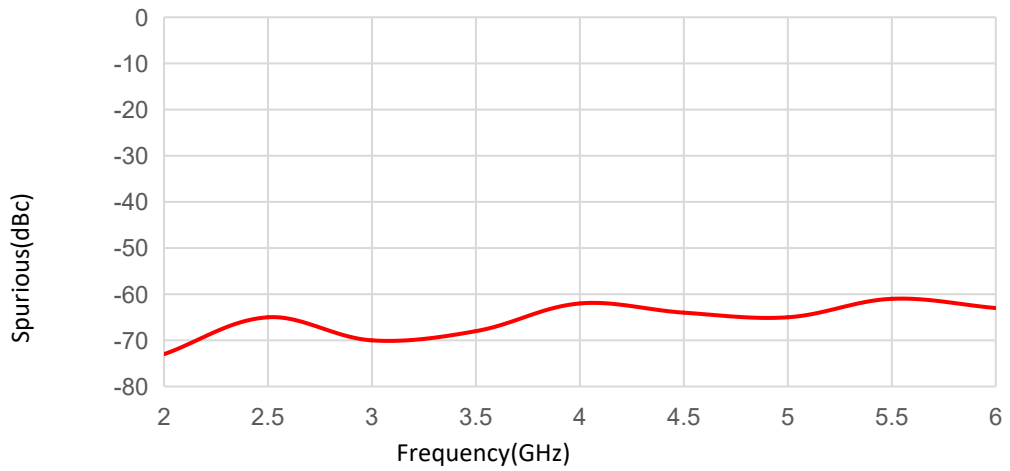
Pout vs Frequency



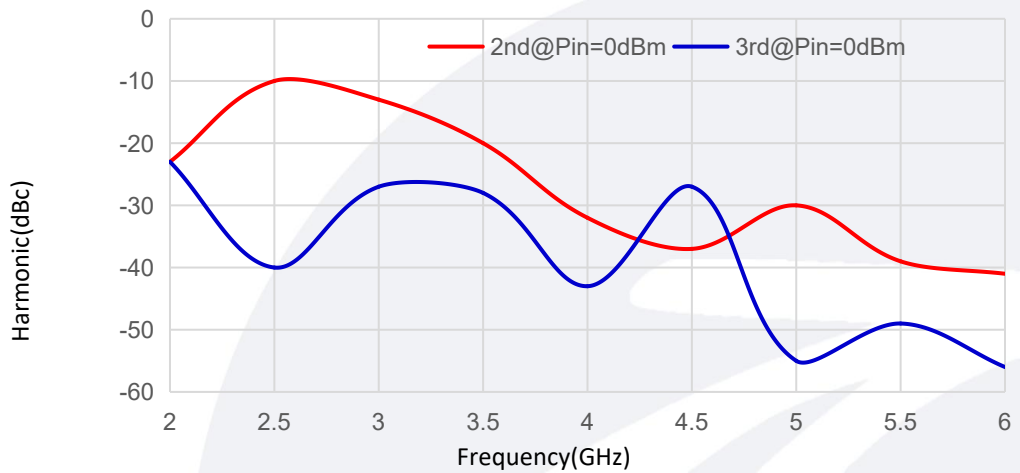
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

Spurious vs Frequency



Harmonic vs Frequency



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