

Model:TLPA0.5G3G-47-47

Power Amplifier

0.5-3GHz,Gain:47dB,Psat:47dBm

Feature:

- Ultra Wide Band: 0.5-3GHz
- Gain:47dB Min
- Psat Output Power:47dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.5-3			GHz
Gain	47			dB
Gain Flatness			±2	dB
Output Psat	47			dBm
Spurious			-65	dBc
Harmonics			-10	dBc
Input VSWR			1.8	:1
DC Voltage		+32	+33	V DC
DC Supply Current		10		A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Power Interface	Cap Feed	
Size	35*40*12	mm
Weight	/	g

Absolute Maximum Ratings:

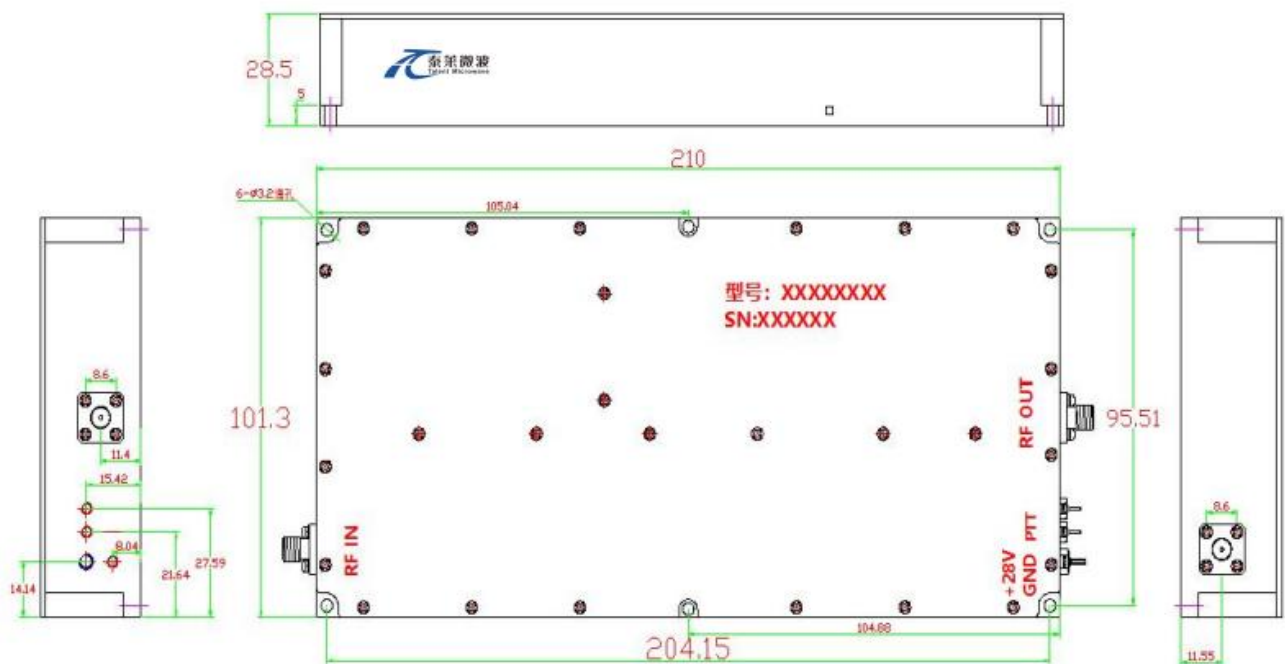
Parameter	Value
Supply Bias Voltage	+32V
RF Input Power	6dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



*****Heat Sink Required During Operation**

Environmental Conditions:



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

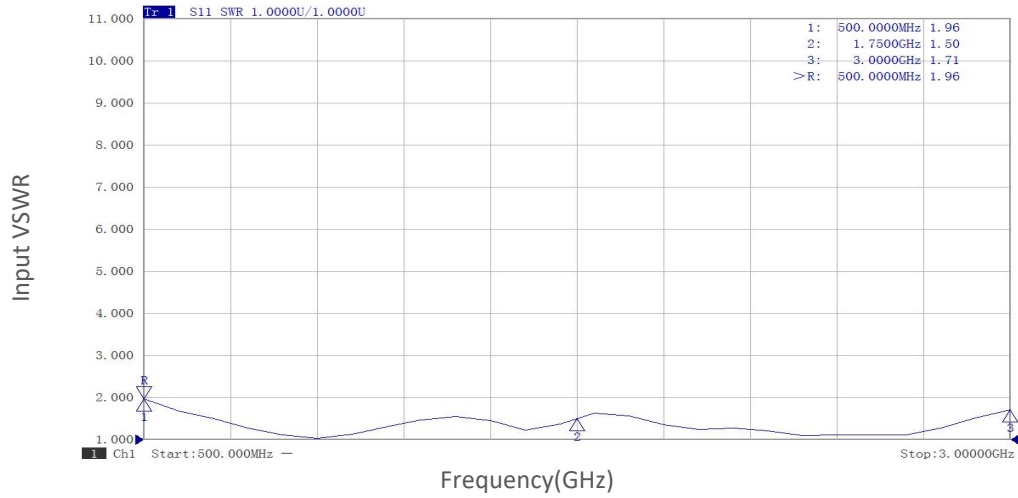
Parameter	Min	Typ	Max	Units
Operating Temperature	-25		+55	°C
Non-operating Temperature	-20		+75	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

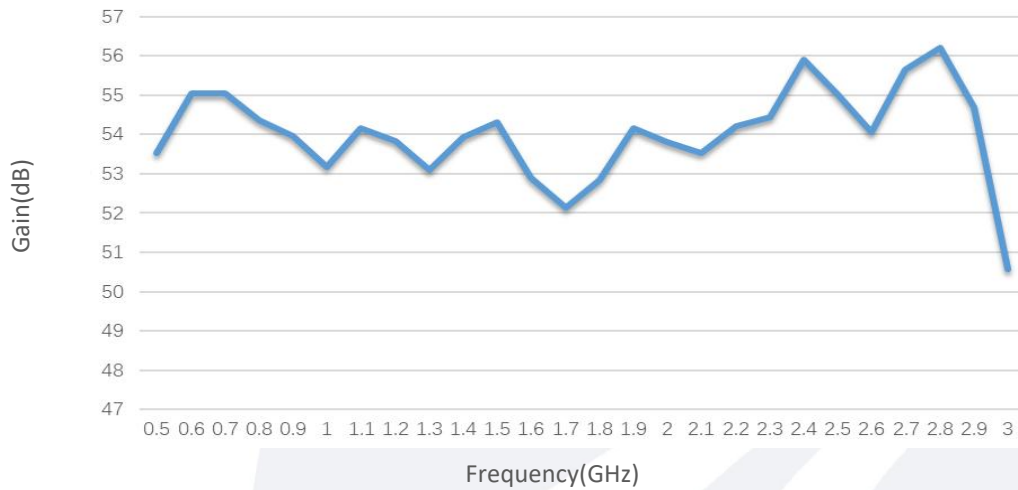
Part Number	Description	Revision
TLPA0.5G3G-47-47	Power amplifier 0.5-3GHz,Gain:47dB,Psat:47dBm,+32V DC,Without Heatsink.	Rev.1.1
TLPA0.5G3G-47-47-HS	Power amplifier 0.5-3GHz,Gain:47dB,Psat:47dBm,+32V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

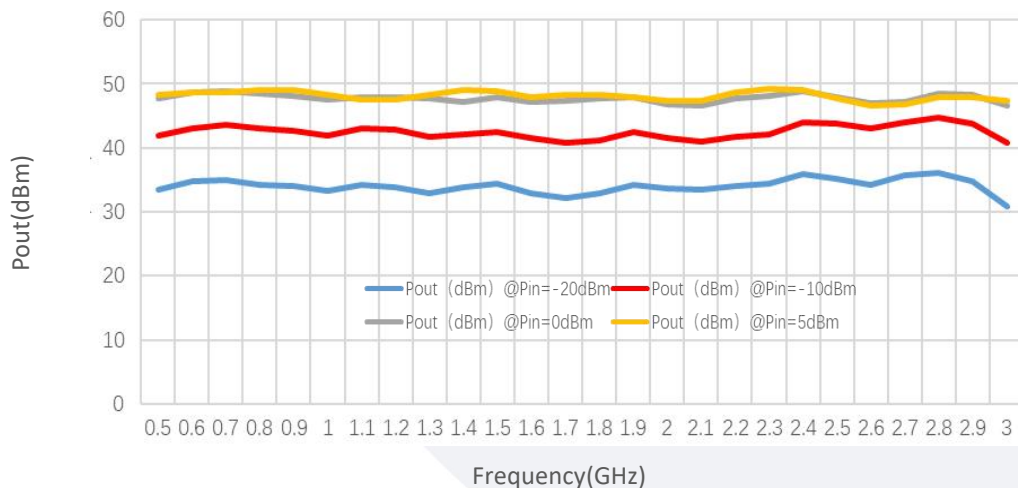
Input VSWR vs Frequency



Gain vs Frequency

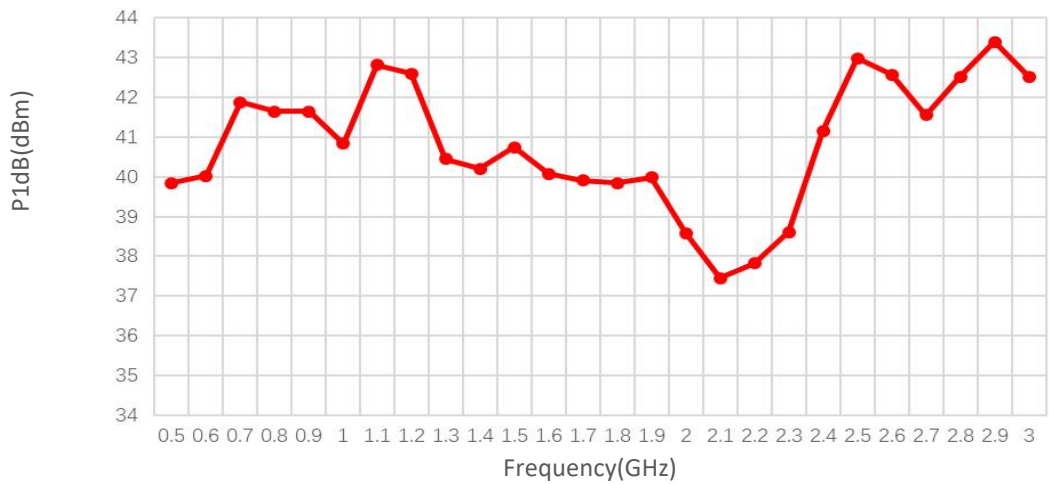


Pout@Equal_Pin

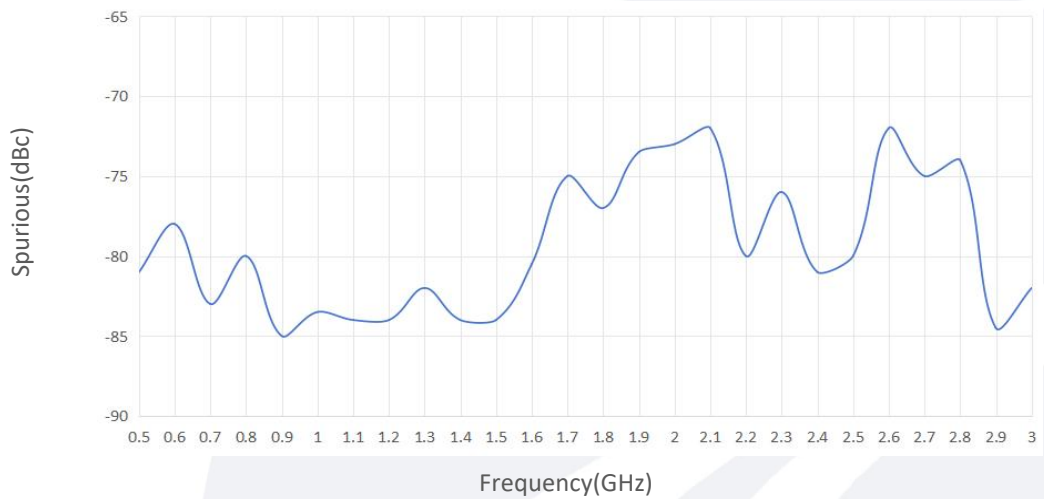


Typical Performance Data:

P1dB vs Frequency



Spurious vs Frequency



Pout@Pin

