

Model:TLPA47G52G-20-18

Power Amplifier

47-52GHz,Gain:20dB,P1dB:18dBm

Feature:

- Ultra Wide Band: 47-52GHz
- Gain:20dB Min
- P1dB Output Power:18dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	47-52			GHz
Gain	20			dB
Output P1dB	18			dBm
Spurious			-50	dBc
DC Voltage		+12		V DC
DC Supply Current			0.7	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.4 Female/2.4 Female	
DC Bias	Solder Pin	
Size	60*65*11	mm
Weight	500	g

Absolute Maximum Ratings:

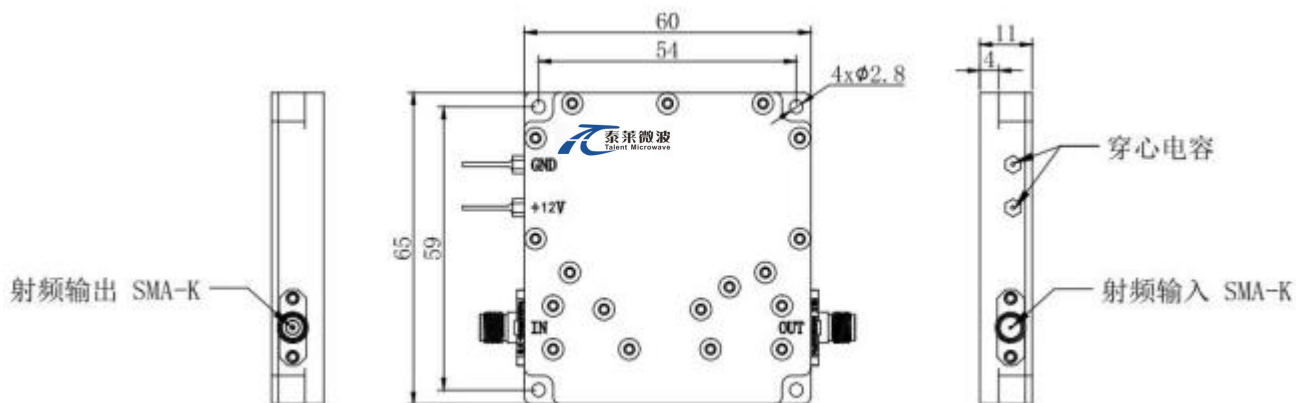
Parameter	Value
Supply Bias Voltage	+12V
RF Input Power	+5dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



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

Environmental Conditions:



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

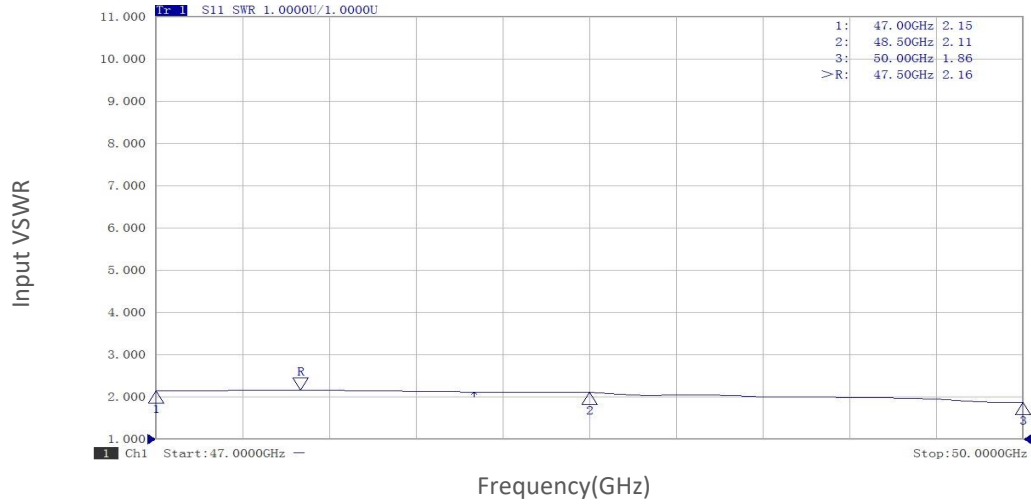
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+60	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude		50000		feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

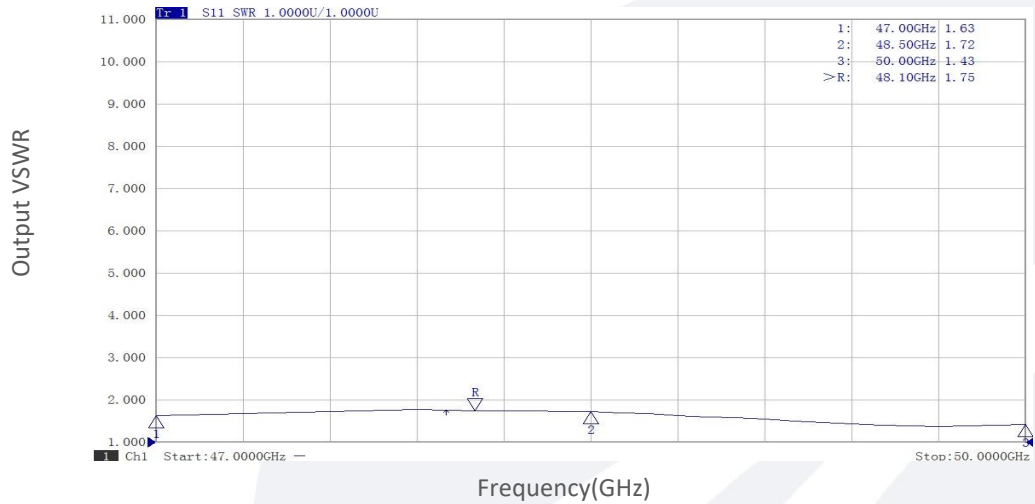
Part Number	Description	Revision
TLPA47G52G-20-18	Power amplifier 47-52GHz,Gain:20dB,P1dB:18dBm,+12V DC,Without Heatsink.	Rev.1.1
TLPA47G52G-20-18-HS	Power amplifier 47-52GHz,Gain:20dB,P1dB:18dBm,+12V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

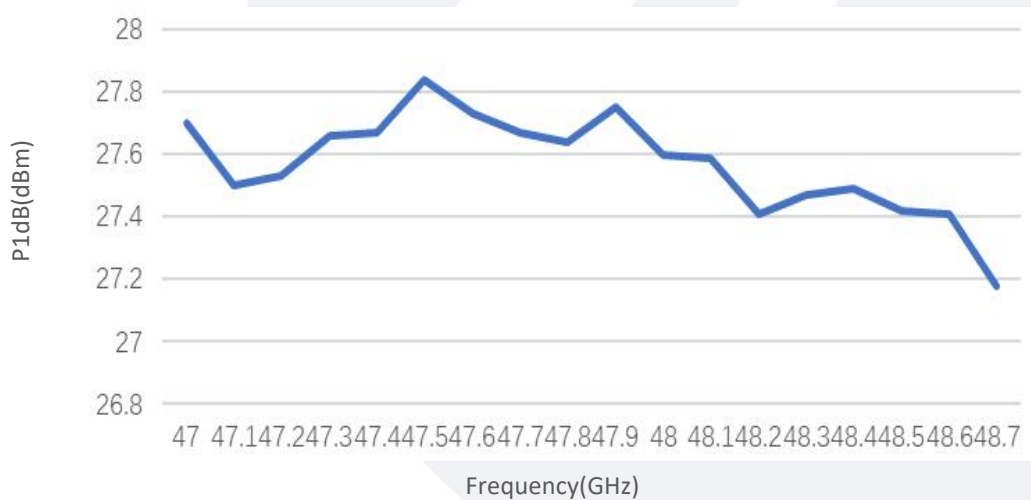
Input VSWR vs Frequency



Output VSWR vs Frequency

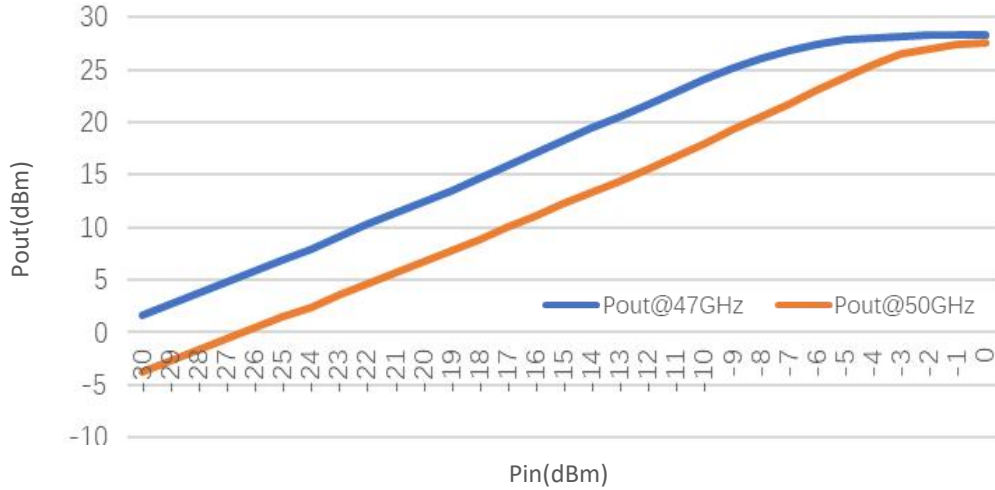


P1dB vs Frequency

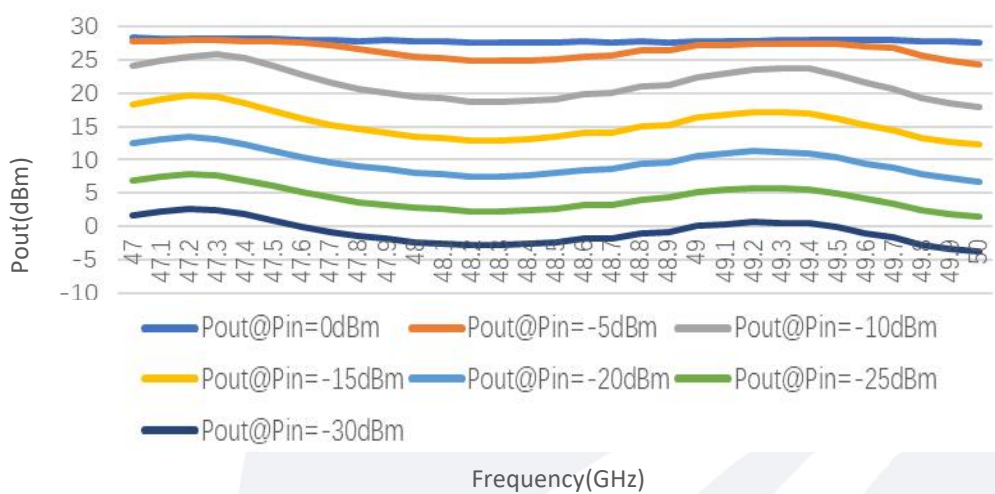


Typical Performance Data:

Pout@Pin



Pout@Equal_Pin



Spurious vs Frequency

