

Model:TLPA0.05G12G-30-30
Power Amplifier
0.05-12GHz,Gain:33dB,P1dB:30dBm
Feature:

- Ultra Wide Band: 0.05-12GHz
- Gain: 30dB Min
- Psat Output Power: 31dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.05-12			GHz
Gain	30	33		dB
Gain Flatness		±3		dB
Output P1dB	30			dBm
Output Psat		31		dBm
Second Harmonic		-20		dBc
Spurious		-60		dBc
Input VSWR		2		:1
Output VSWR		2		:1
Noise Figure		8		dB
DC Voltage		+24		V DC
DC Supply Current		790	1000	mA
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	35*52*12	mm
Weight	50	g

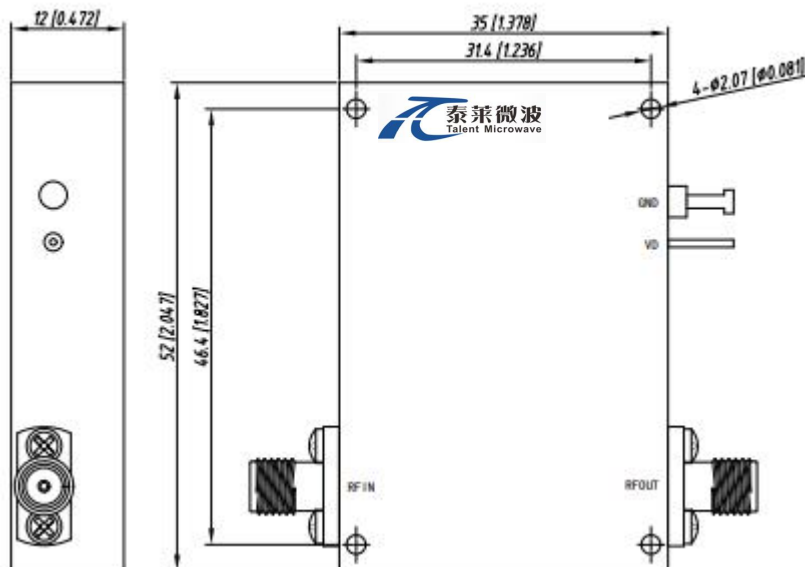
Absolute Maximum Ratings:

Parameter	Value
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**



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

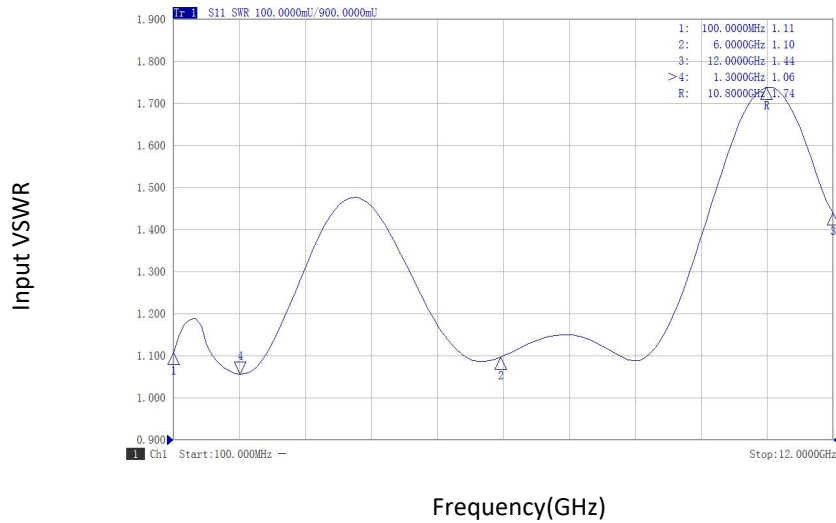
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity	100%RH at 35°C, 95%RH at 40°C			%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

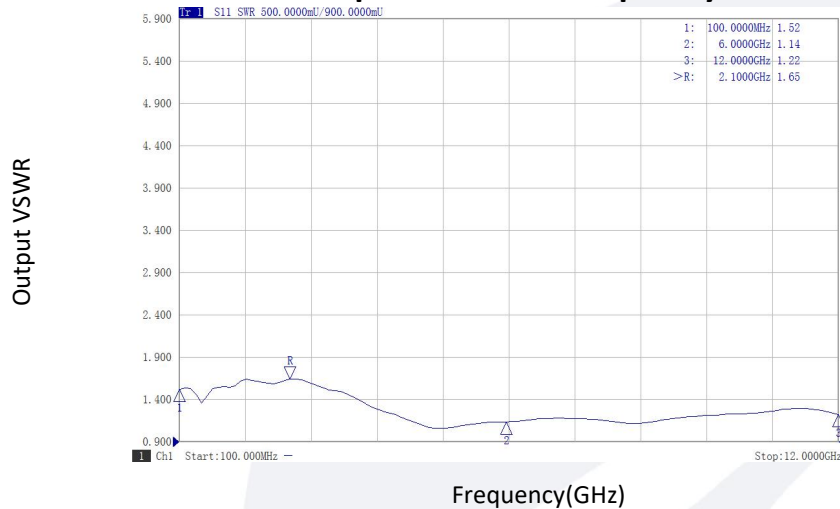
Part Number	Description	Revision
TLPA0.05G12G-30-30	Power amplifier 0.05-12GHz,Gain:33dB,P1dB:30dBm,+24V DC,Without Heatsink.	Rev.1.1
TLPA0.05G12G-30-30-HS	Power amplifier 0.05-12GHz,Gain:33dB,P1dB:30dBm,+24V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

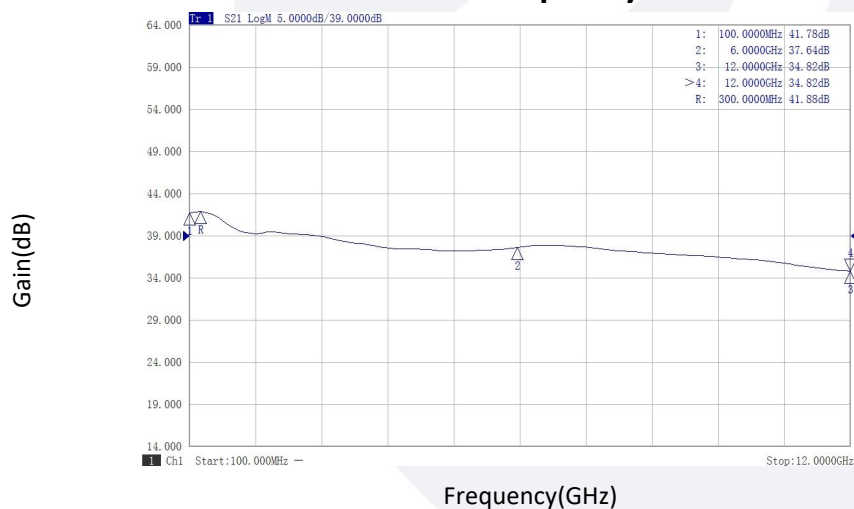
Input VSWR vs Frequency



Output VSWR vs Frequency

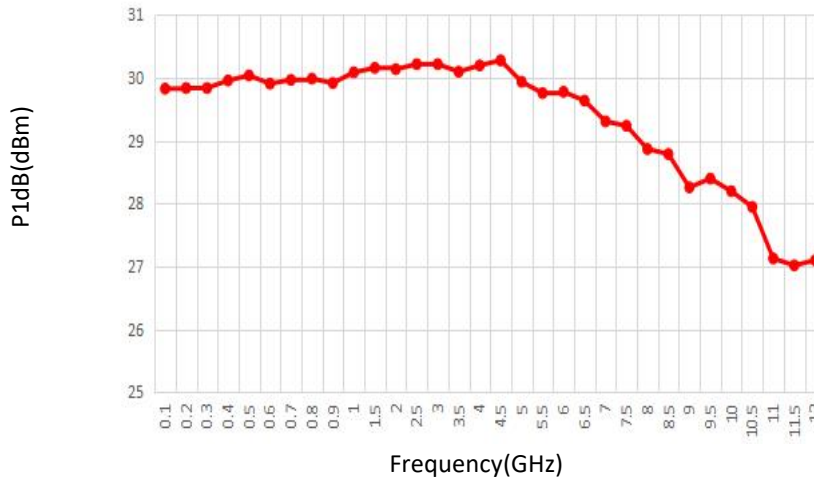


Gain vs Frequency

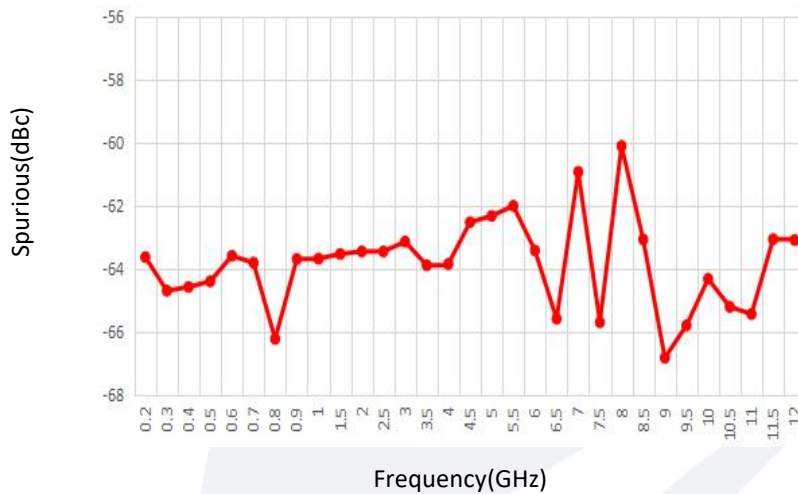


Typical Performance Data:

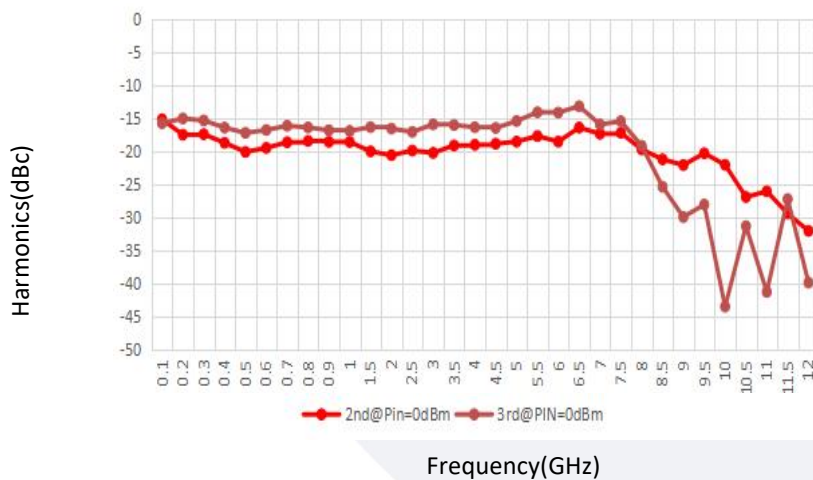
P1dB vs Frequency



Spurious VS Frequency

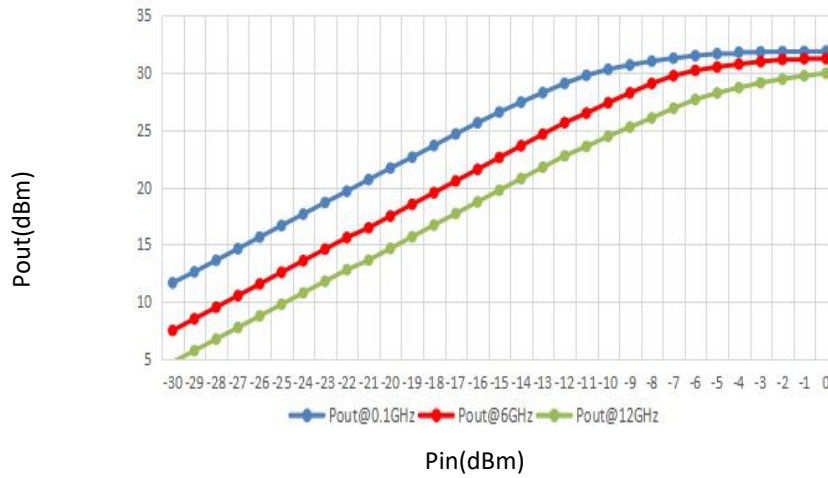


Harmonics VS Frequency



Typical Performance Data:

Pout@Pin



Pout@Equal_Pin

