

Model:TLPA0.01G6.5G-30-30

Power Amplifier 0.01-6.5GHz,Gain:30dB,P1dB:30dBm

Feature:

- Ultra Wide Band: 0.1-6.5GHz
- Gain:30dB Min
- P1dB Output Power:30dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.01-6.5			GHz
Gain	30	35		dB
Gain Flatness		±3	±4	dB
Output P1dB	30	32		dBm
Output Psat	33	34		dBm
Spurious@Pout=30dBm			-60	dBc
Harmonics@Pout=30dBm			-8	dBc
Input VSWR		1.5	2	:1
DC Voltage	+10	+12	+13	V DC
DC Supply Current		0.5	1.3	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	90.2*70*15	mm
Weight	250	g

Absolute Maximum Ratings:

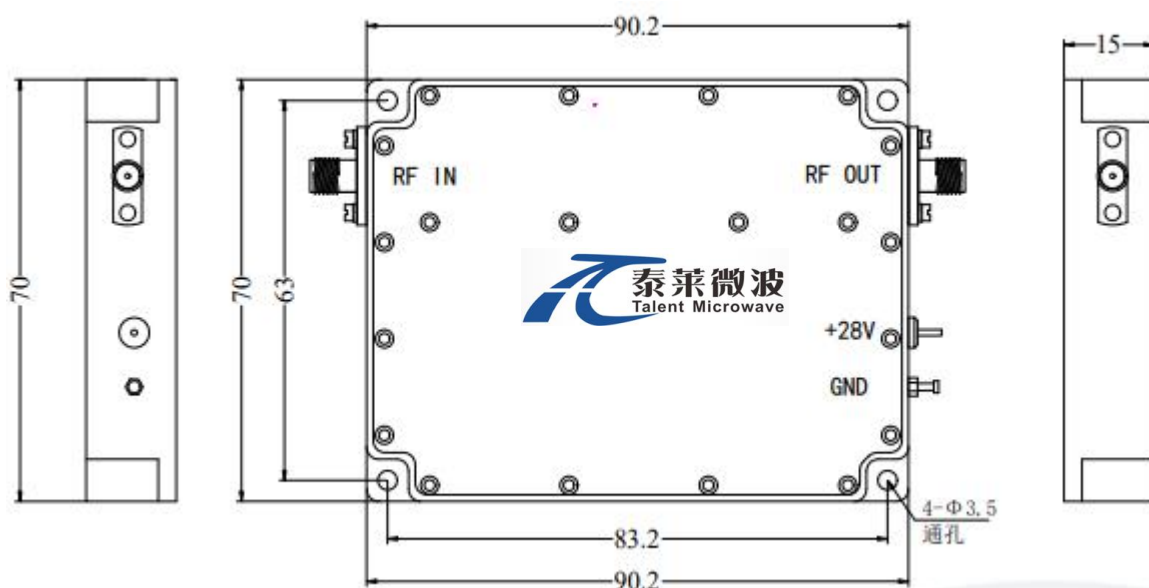
Parameter	Value
Supply Bias Voltage	+13V
RF Input Power	5dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation

Environmental Conditions:



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

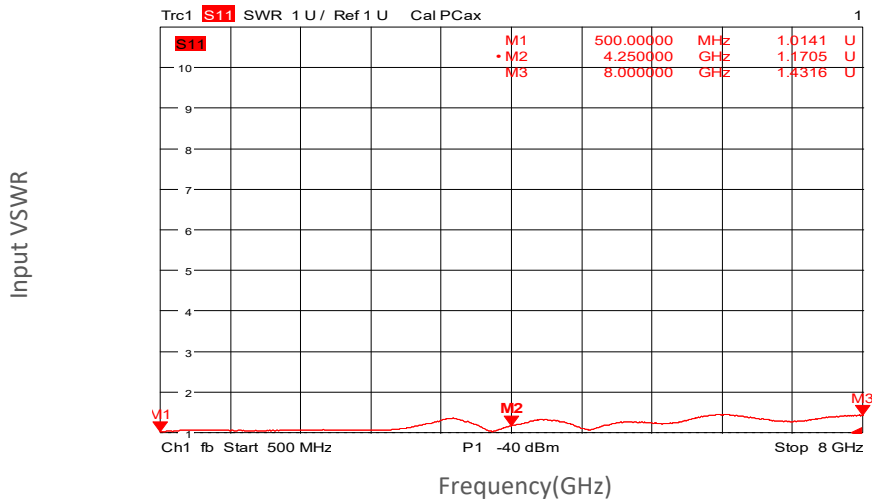
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

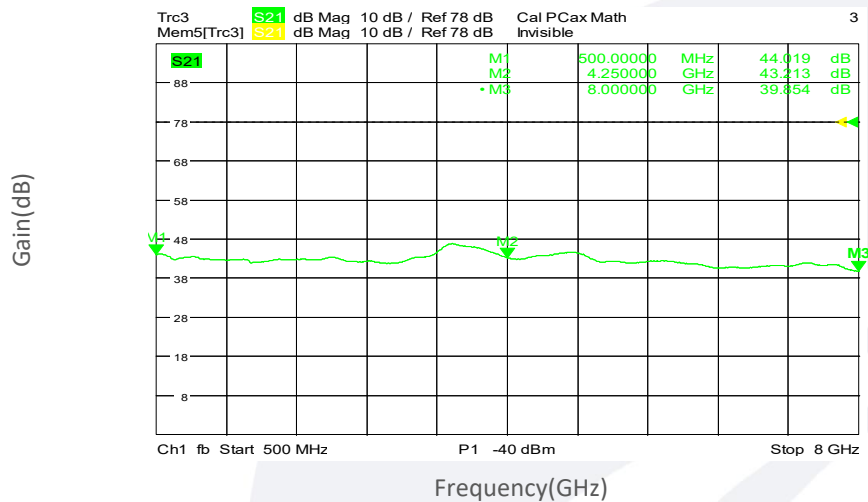
Part Number	Description	Revision
TLPA0.01G6.5G-30-30	Power amplifier 0.01-6.5GHz,Gain:30dB,P1dB:30dBm,+12V DC,Without Heatsink.	Rev.1.1
TLPA0.01G6.5G-30-30-HS	Power amplifier 0.01-6.5GHz,Gain:30dB,P1dB:30dBm,+12V DC,With Heatsink.	Rev.1.1

Typical Performance Data:

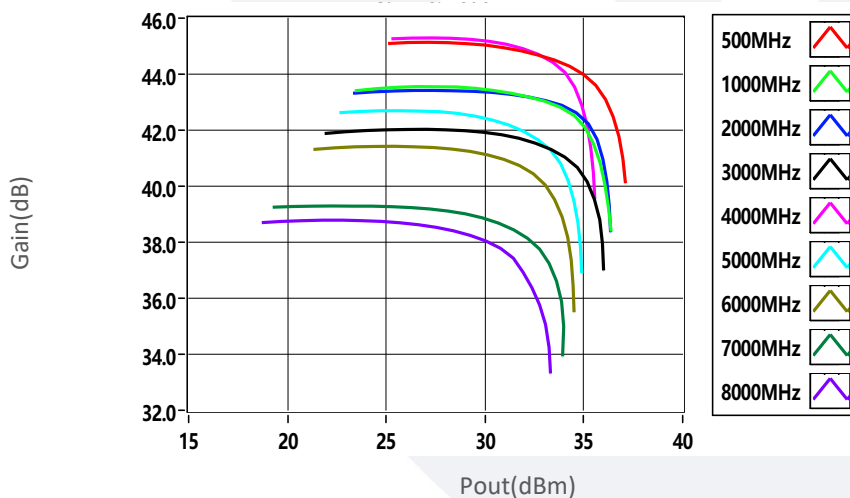
Input VSWR vs Frequency



Gain vs Frequency

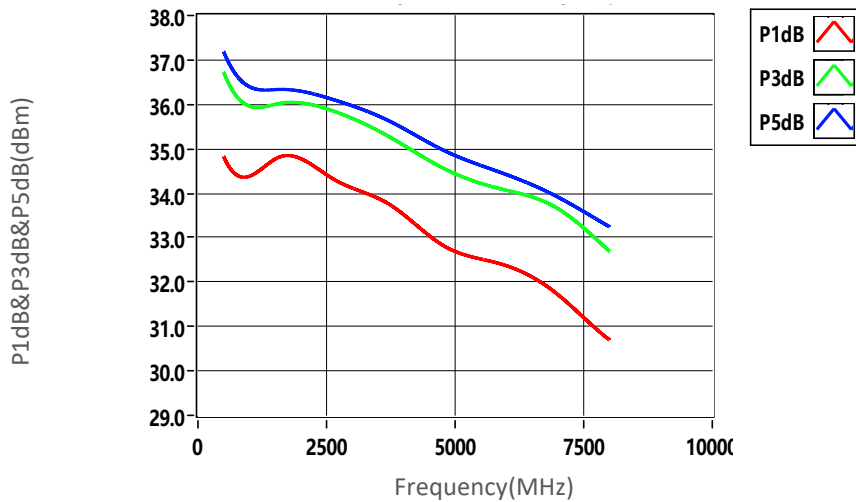


Gain vs Output Power

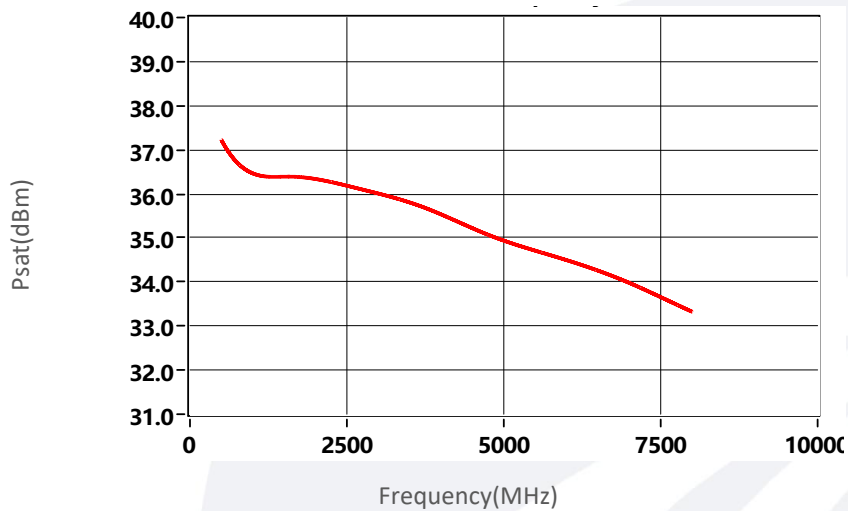


Typical Performance Data:

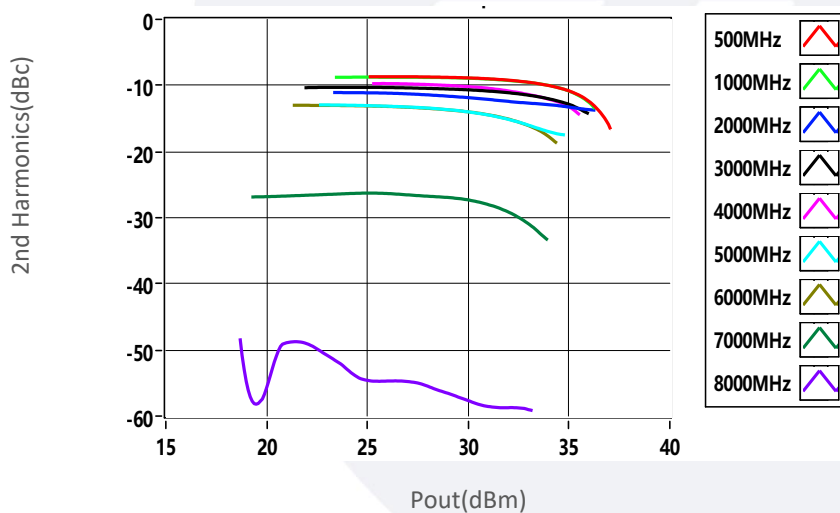
P1dB&P3dB&P5dB vs Frequency



Psat vs Frequency



2nd Harmonics vs Output Power



Typical Performance Data:

3rd Harmonics vs Output Power

