

Model:TLPA0.5G6G-45-43

Power Amplifier

0.5-6GHz, Gain:45dB, Psat:43dBm

Feature:

- Ultra Wide Band: 0.5-6GHz
- Gain:45 dB Typ
- Psat Output Power: 43 dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.5-6			GHz
Gain	43	45		dB
Gain Flatness		±3.5		dB
Output Psat	41	43		dBm
Spurious			-50	dBc
Harmonics			-10	dBc
Input VSWR			1.8	:1
DC Voltage	+28			V DC
DC Supply Current		3		A
Impedance	50			Ohms

Mechanical Specifications:

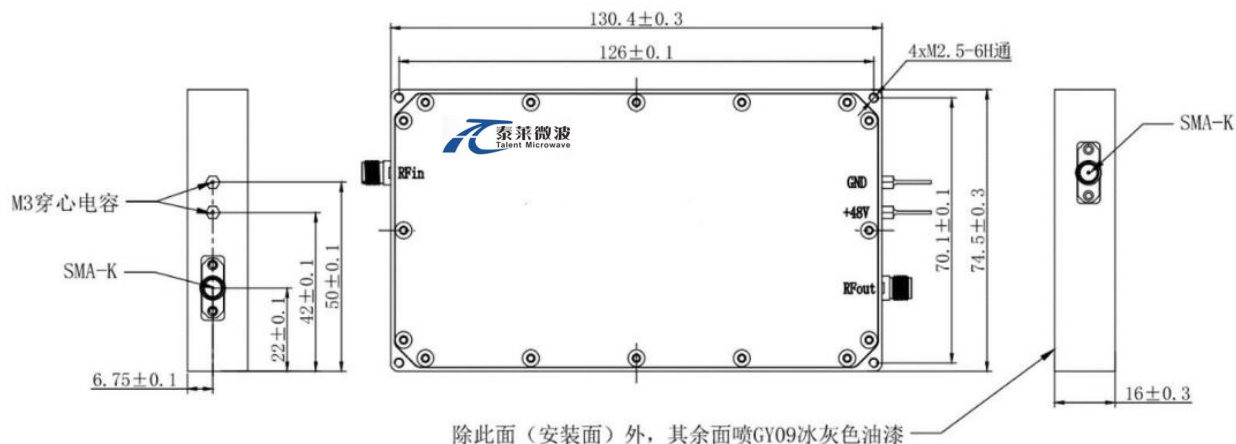
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	130*74.5*16	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28V
RF Input Power	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

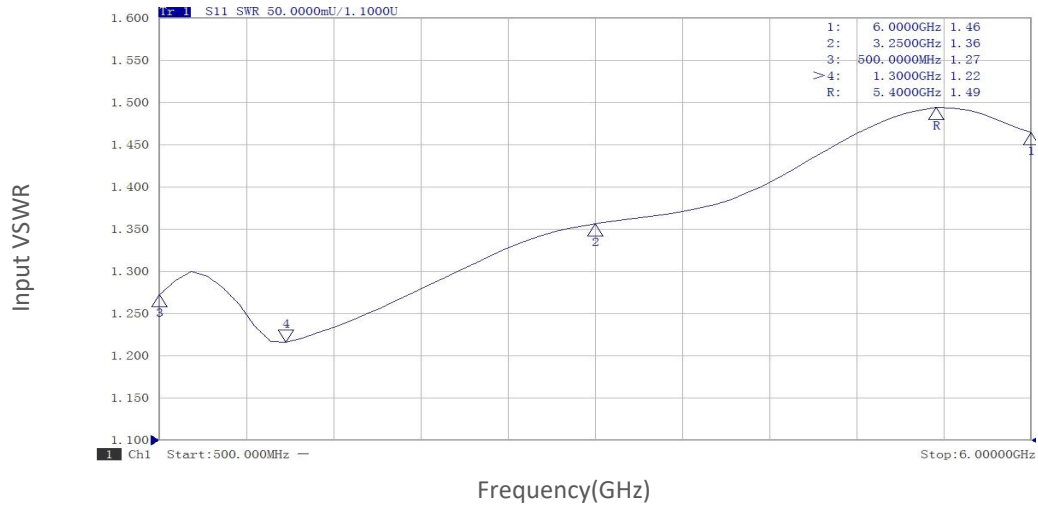
Parameter	Min	Typ	Max	Units
Operating Temperature	-40		+75	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

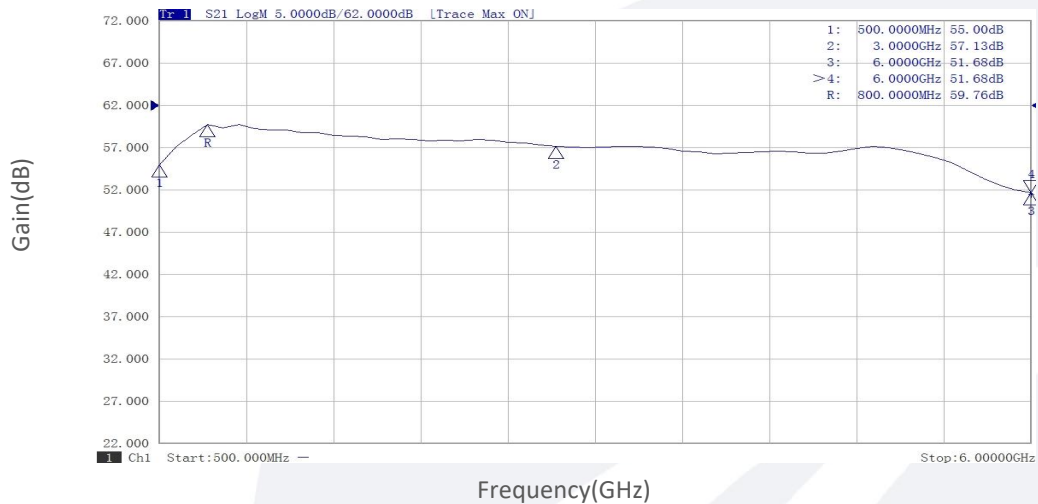
Part Number	Description	Revision
TLPA0.5G6G-45-43	Power amplifier 0.5-6GHz,Gain:45dB,Psat:43dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA0.5G6G-45-43-HS	Power amplifier 0.5-6GHz,Gain:45dB,Psat:43dBm, +28V DC,With Heatsink	Rev.1.1

Typical Performance Data:

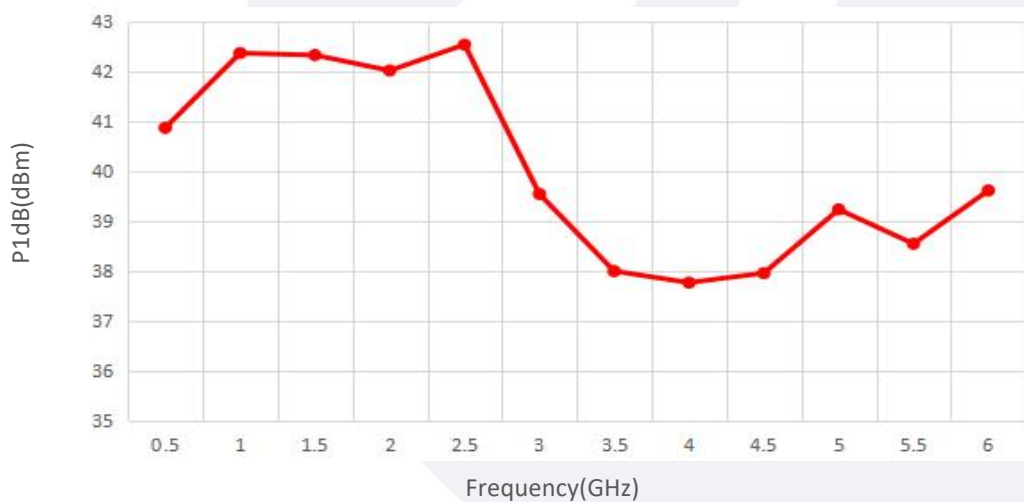
Input VSWR vs Frequency



Gain vs Frequency

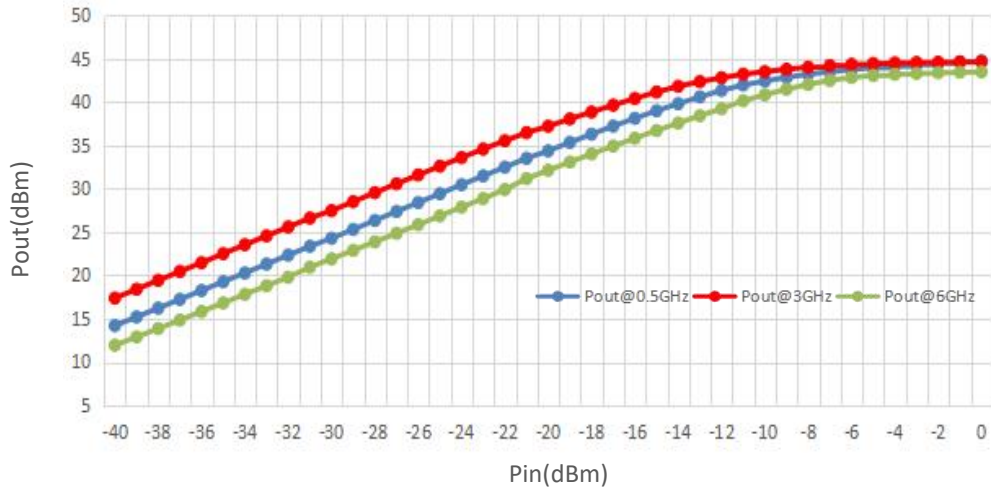


P1dB vs Frequency

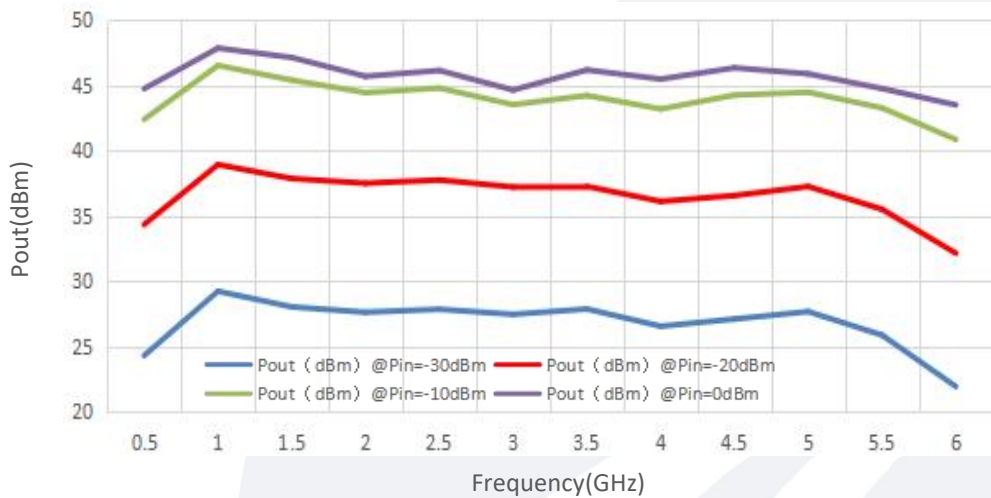


Typical Performance Data:

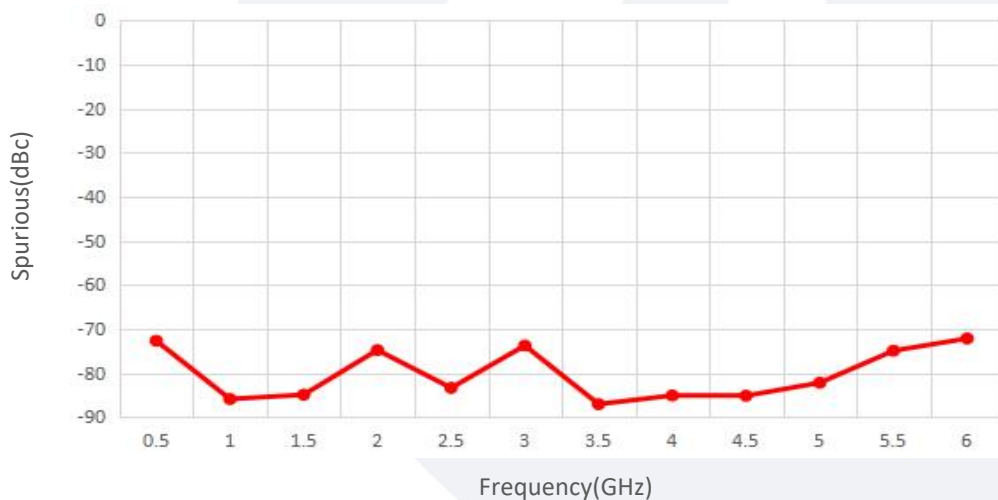
Pout@Pin



Pout@Equal_Pin



Spurious vs Frequency



Typical Performance Data:

Harmonic vs Frequency

