

Model:TLPA4G6G-40-41**Power Amplifier**
4-6GHz,Gain:40dB,Psat:41dBm**Feature:**

- Ultra Wide Band: 4-6GHz
- Gain:40dB Min
- Psat Output Power: 41dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	4-6			GHz
Small Signal Gain	40	42		dB
Gain Flatness		±2	±3	dB
Output P1dB	40	40.5		dBm
Output Psat	41	41.5		dBm
Harmonics			-15	dBc
Input VSWR		1.5	2.0	:1
DC Voltage	+26	+28	+30	V DC
DC Supply Current		0.5	2	A
Impedance	50			Ohms

Mechanical Specifications:

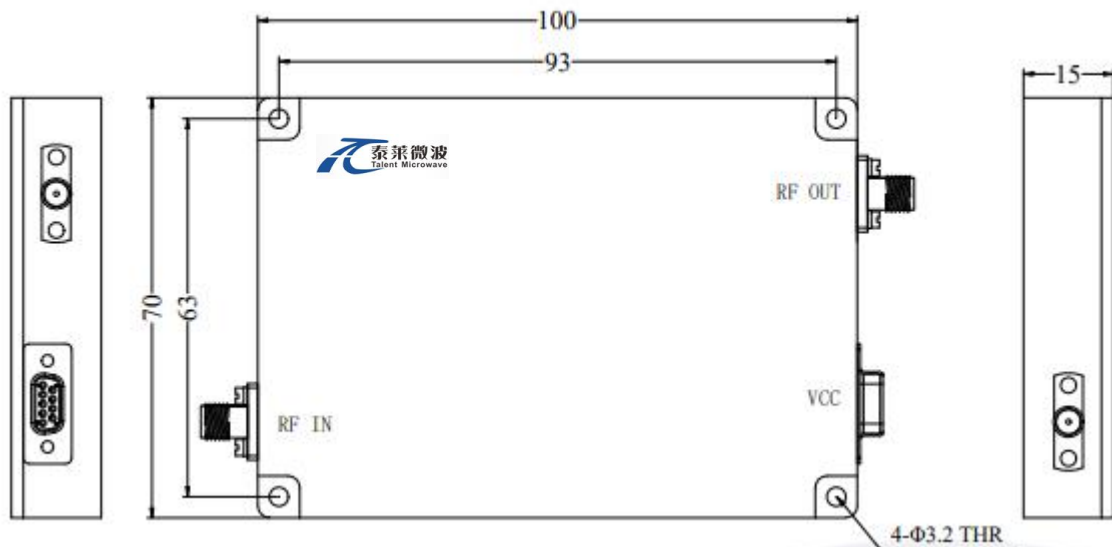
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	100*86*40	mm
Weight	250	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+30V
RF Input Power	5dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Power Connector: J30J-9ZKW-J(J30J-9TJL)

Pin	Identification	Function
1	TTL	Turn on the amplifier at a high level(or suspended)and turn off the amplifier when short circuited to ground.
2	GND	
3	GND	
4	GND	
5	GND	
6	+28V	+26.0-30.0VDC
7	+28V	+26.0-30.0VDC
8	+28V	+26.0-30.0VDC
9	+28V	+26.0-30.0VDC

Note: TTL high=5V

Environmental Conditions:

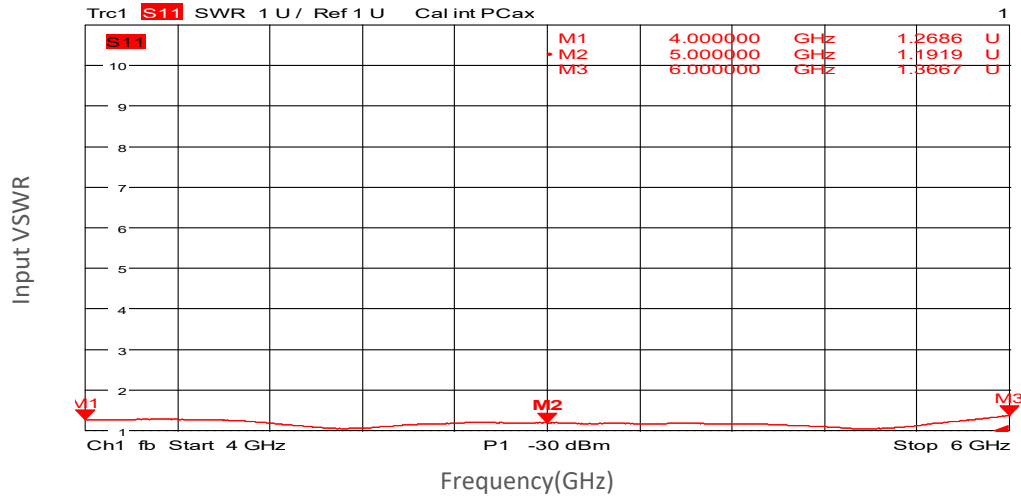
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	30,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

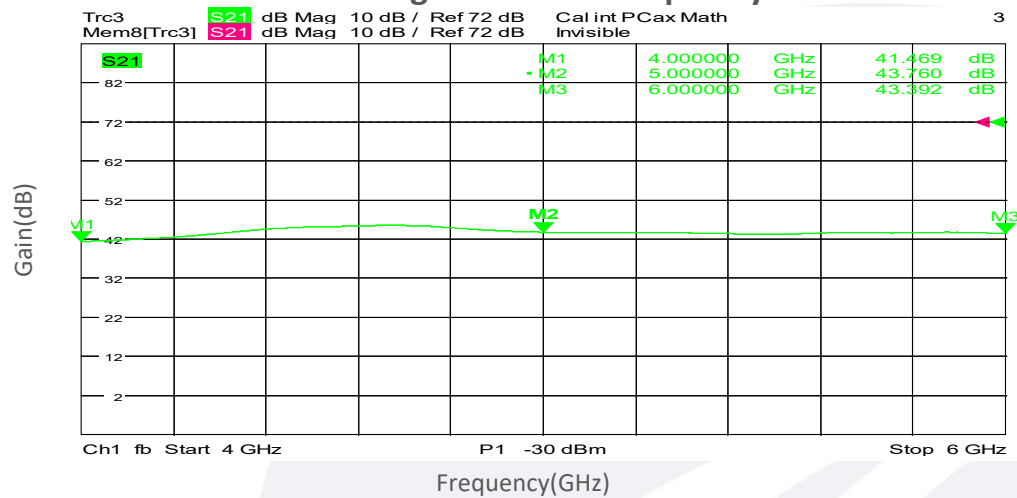
Part Number	Description	Revision
TLPA4G6G-40-41	Power amplifier 4-6GHz,Gain:40dB,Psat:41dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA4G6G-40-41-HS	Power amplifier 4-6GHz,Gain:40dB,Psat:41dBm, +28V DC,With Heatsink	Rev.1.1

Typical Performance Data:

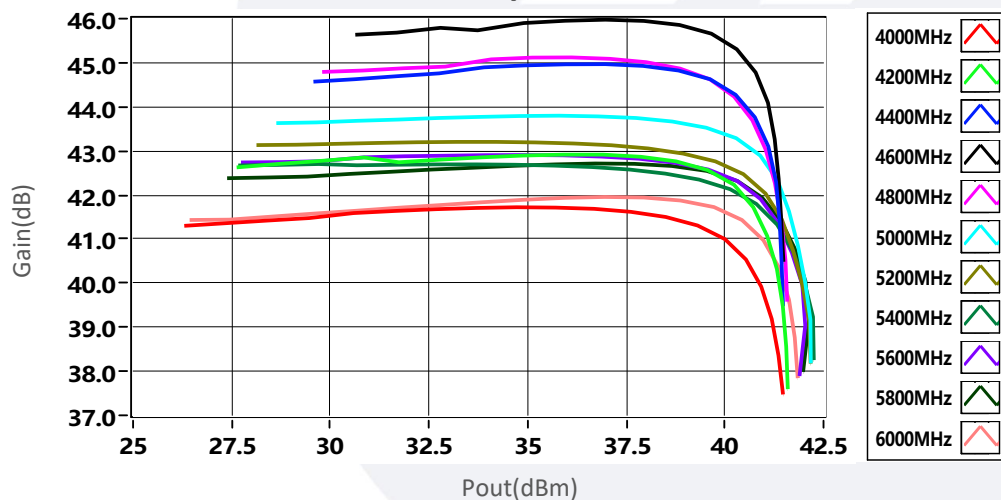
Input VSWR vs Frequency



Small Signal Gain vs Frequency



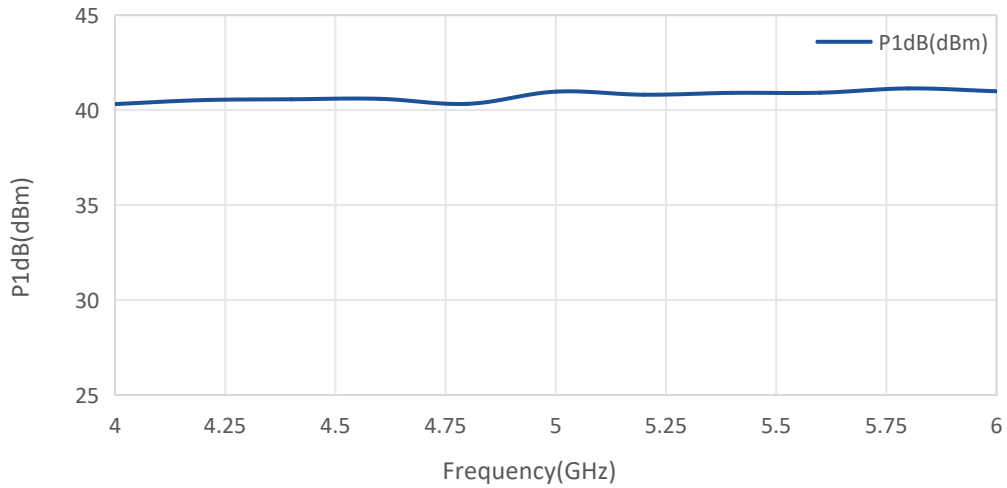
Gain vs Output Power



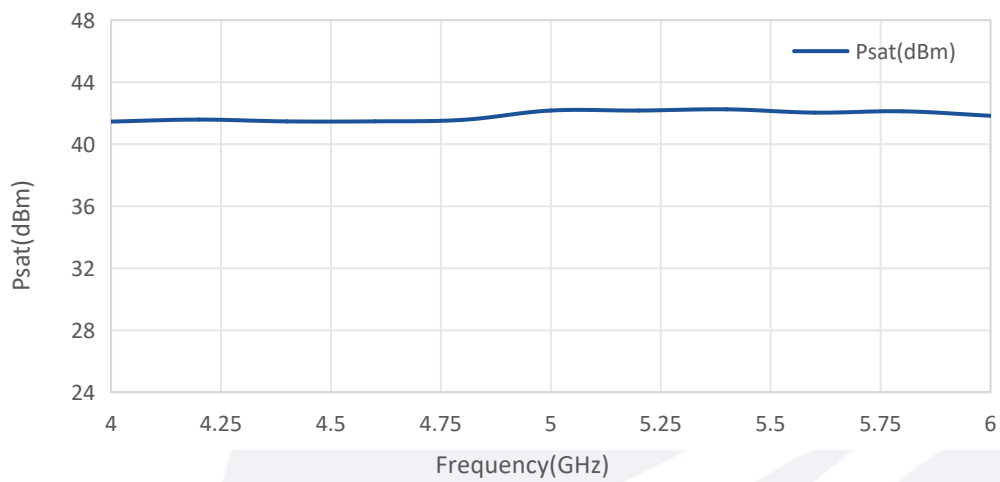
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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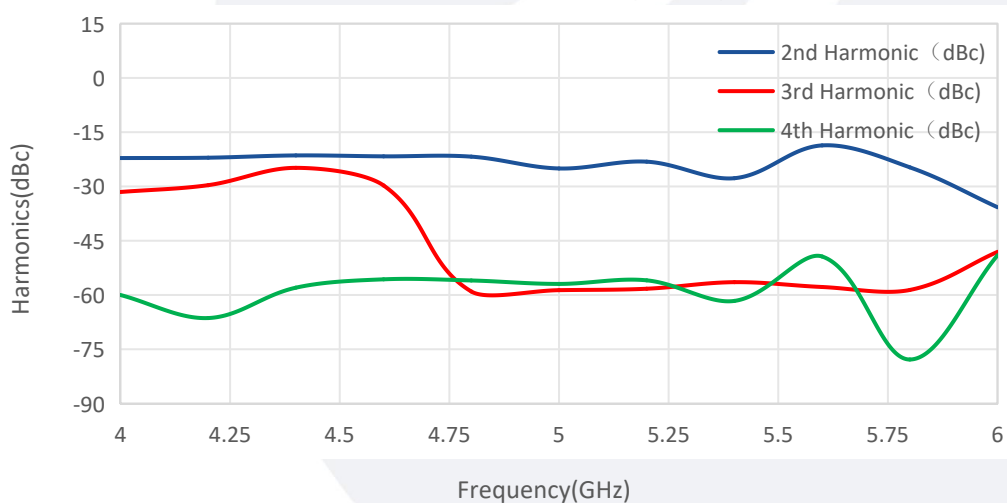
P1dB vs Frequency



Psat vs Frequency



Harmonics vs Frequency



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