

Model:TLPA40G50G-33-33**Power Amplifier**
40-50GHz,Gain:33dB,Psat:33dBm**Feature:**

- Ultra Wide Band: 40-50GHz
- Gain: 33 dB Min
- Psat Output Power: 33 dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	40-50			GHz
Small Signal Gain	33			dB
Output Psat	33	34		dBm
Supurious			-50	dBc
VSWR		3		:1
Input Power		0	5	dBm
DC Voltage		+18	+20	V DC
Current	2.5A@Max			A
Impedance	50			Ohms

Mechanical Specifications:

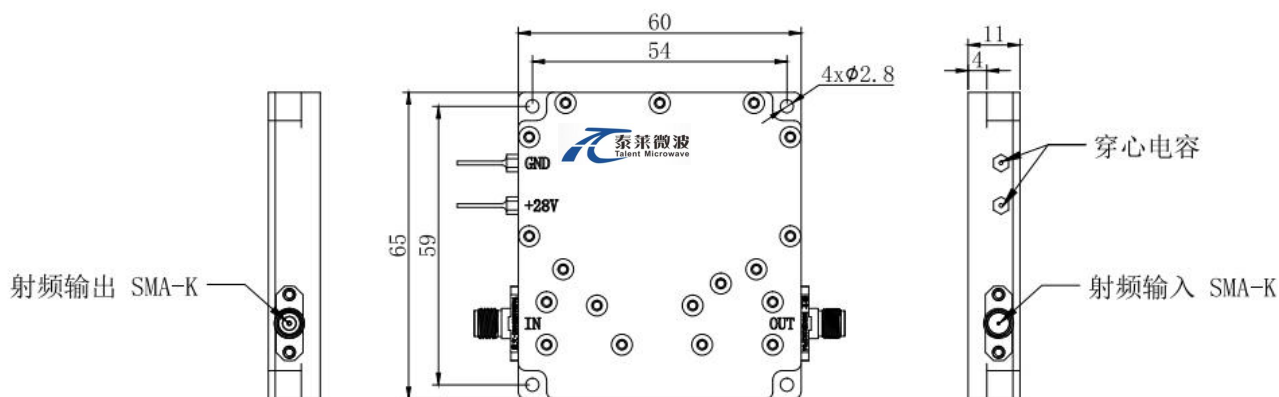
Parameter	Value	Units
Input /Output Connector	2.4 Female/2.4 Female	
DC Bias	Solder Pin	
Size	60*65*11	mm
Weight	300	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+20 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



***Heat Sink Required During Operation



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-50		+70	°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			

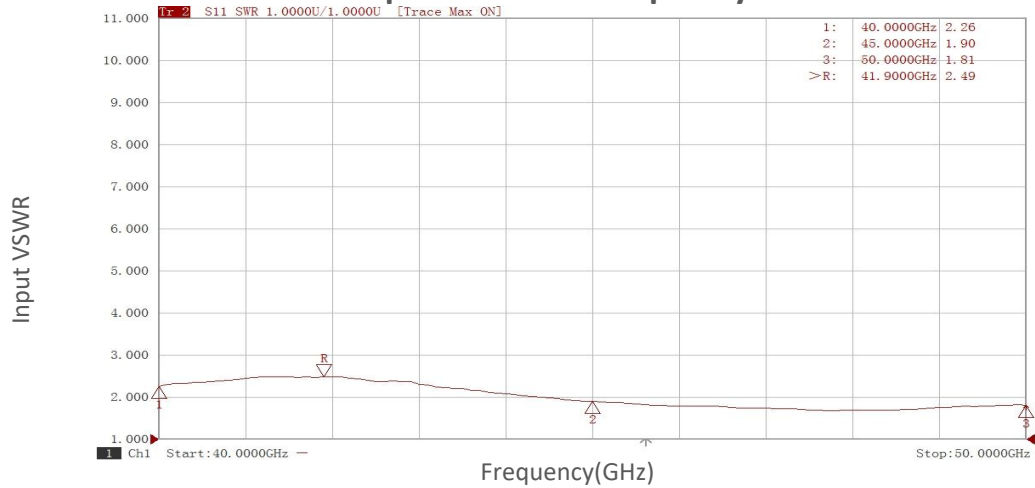
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

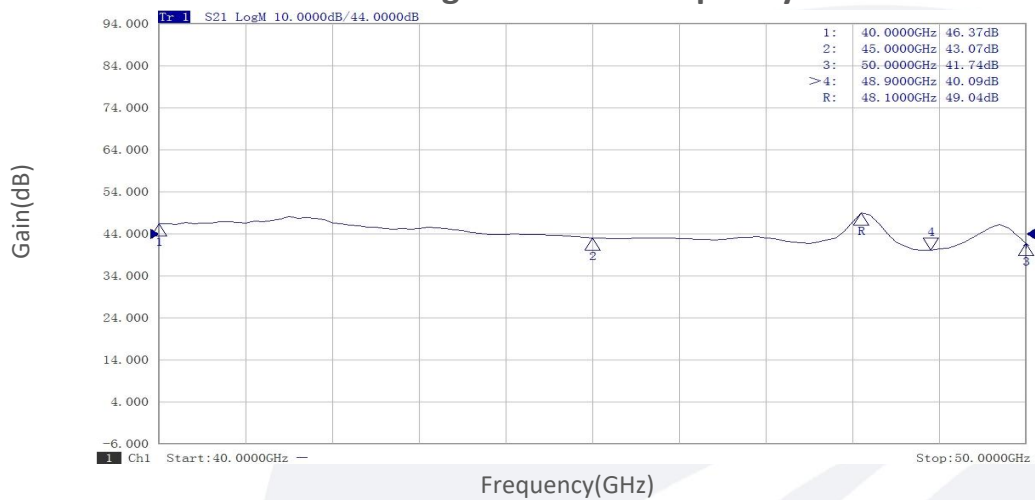
Part Number	Description	Revision
TLPA40G50G-33-33	Power amplifier 40-50GHz,Gain:33dB,Psat:33dBm, +18V DC,Without Heatsink	Rev.1.1
TLPA40G50G-33-33-HS	Power amplifier 40-50GHz,Gain:33dB,Psat:33dBm, +18V DC,With Heatsink	Rev.1.1

Typical Performance Data:

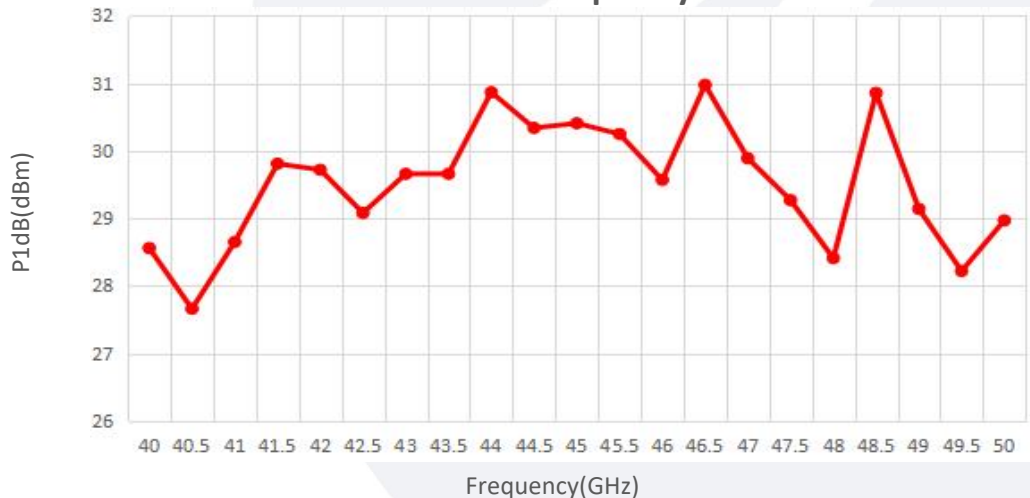
Input VSWR vs Frequency



Small Signal Gain vs Frequency



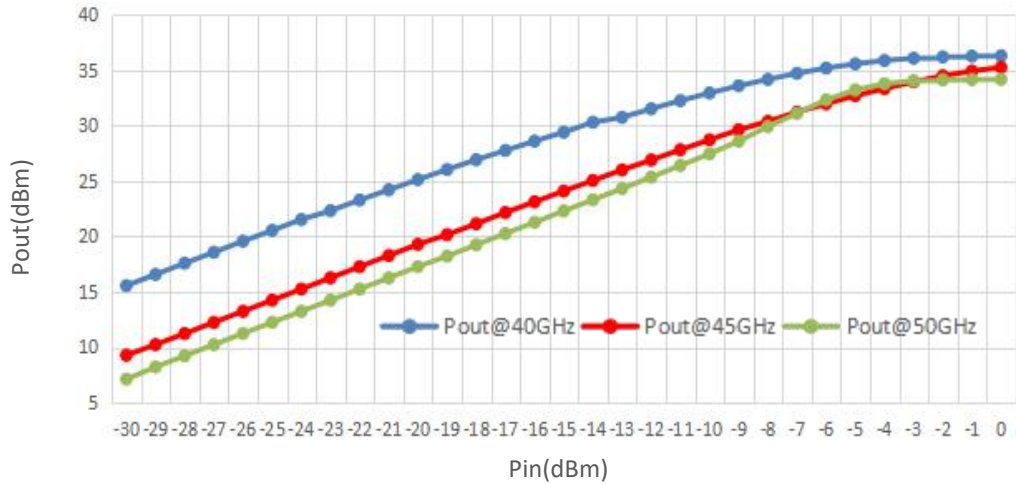
P1dB vs Frequency



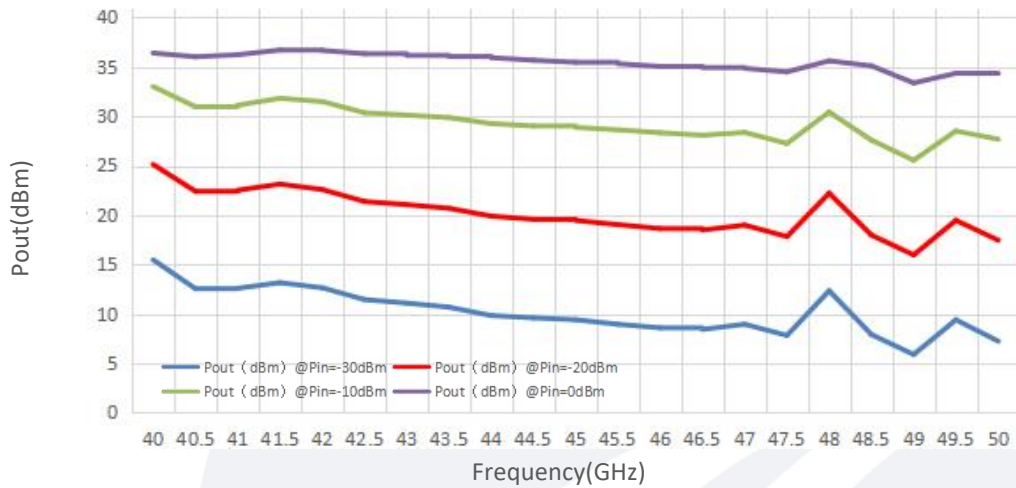
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

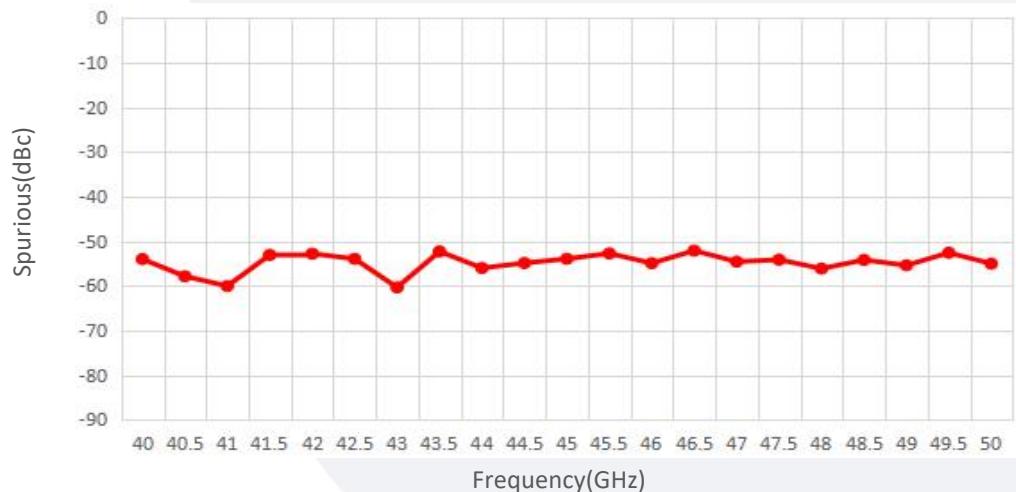
Pout@Pin



Pout@Equal_Pin



Spurious vs Frequency



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