

Model:TLPA18G40G-33-33

Power Amplifier 18-40GHz,Gain:33dB,Psat:33dBm

Feature:

- Ultra Wide Band: 18-40 GHz
- Gain: 33 dB Min
- Psat Output Power: 33 dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	18-40			GHz
Gain	33			dB
Gain Flatness		±5		dB
Output Psat		33		dBm
Supurious@Pout=33dBm			-50	dBc
Harmonic@Pout=33dBm		-15		dBc
Input VSWR		2.0		:1
DC Voltage	+18			V DC
Consumption	40@Max			W
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92 Female/2.92 Female	
DC Bias	Solder Pin	
Size	130.4*74.5*16	mm
Weight	≤500	g

Absolute Maximum Ratings:

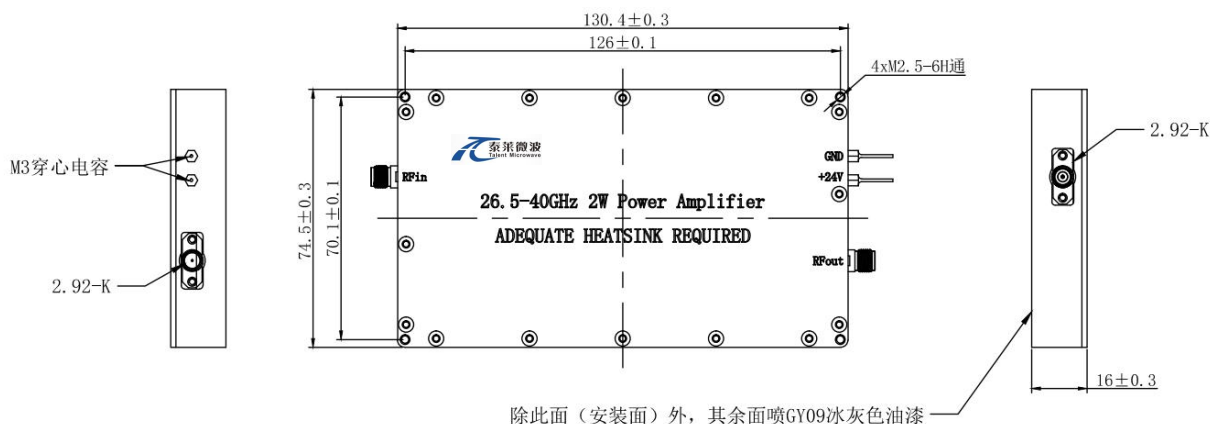
Parameter	Value
Supply Bias Voltage	+18 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



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*	-40		+60	°C
Non-operating Temperature*	-50		+70	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

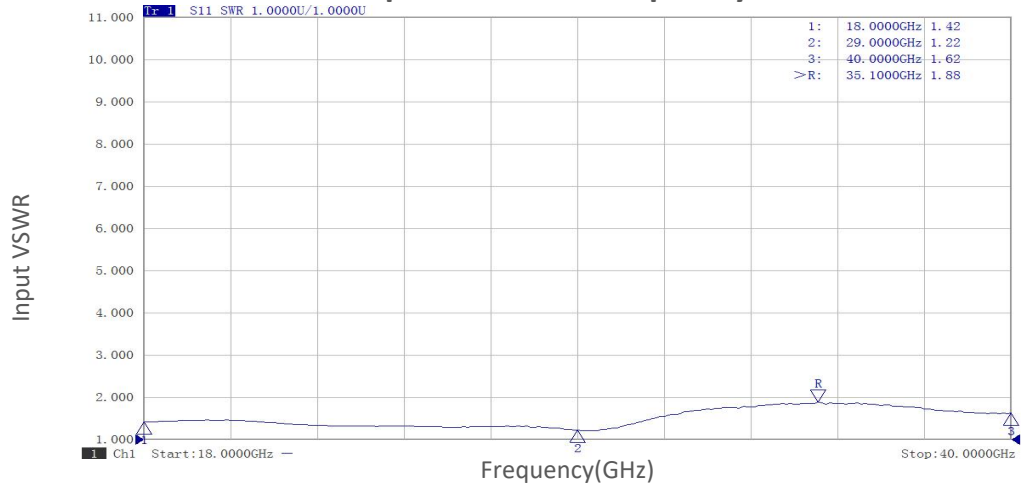
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

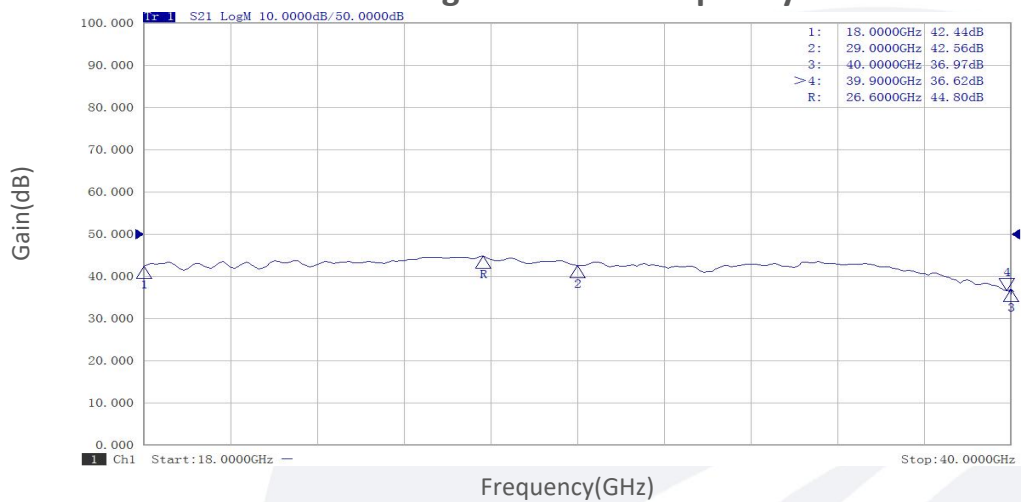
Part Number	Description	Revision
TLPA18G40G-33-33	Power amplifier 18-40GHz,Gain:33dB,Psat:33dBm, +18V DC,Without Heatsink	Rev.1.1
TLPA18G40G-33-33-HS	Power amplifier 18-40GHz,Gain:33dB,Psat:33dBm, +18V DC,With Heatsink	Rev.1.1

Typical Performance Data:

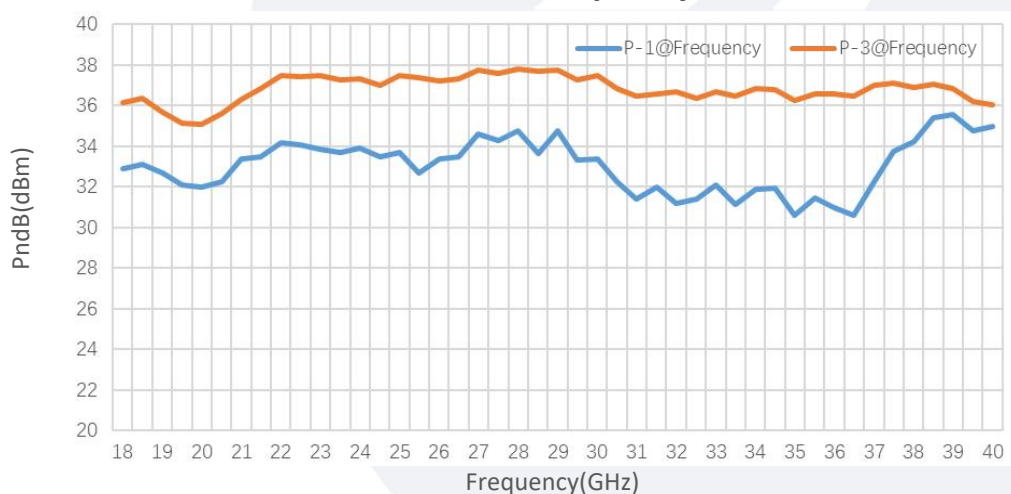
Input VSWR vs Frequency



Small Signal Gain vs Frequency



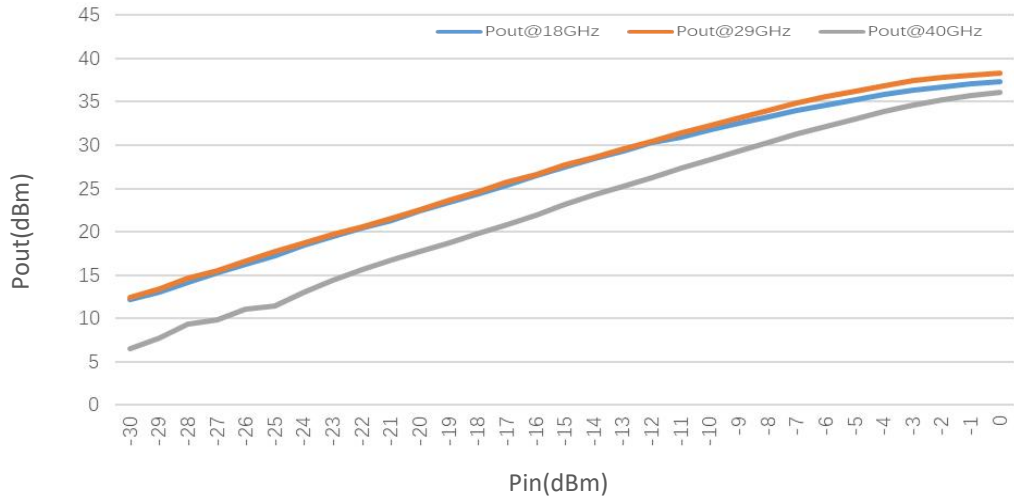
PndB vs Frequency



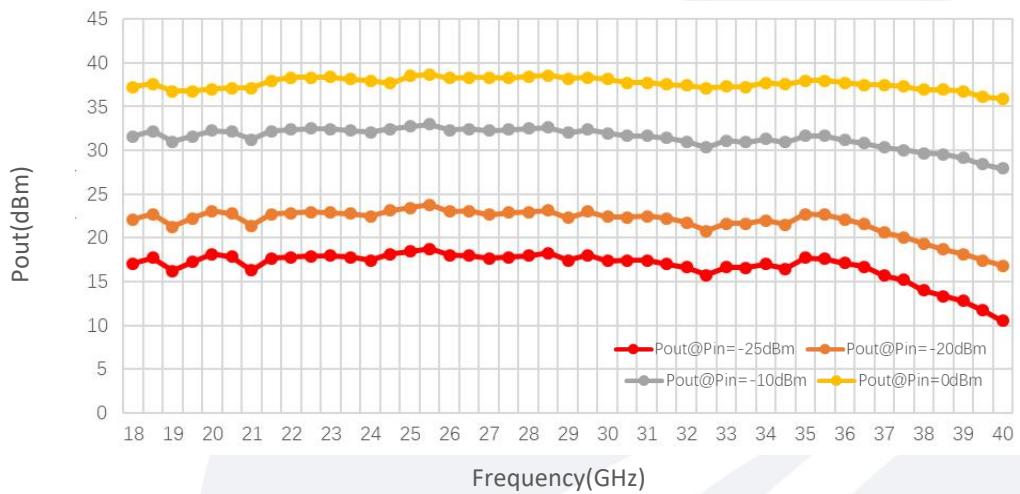
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

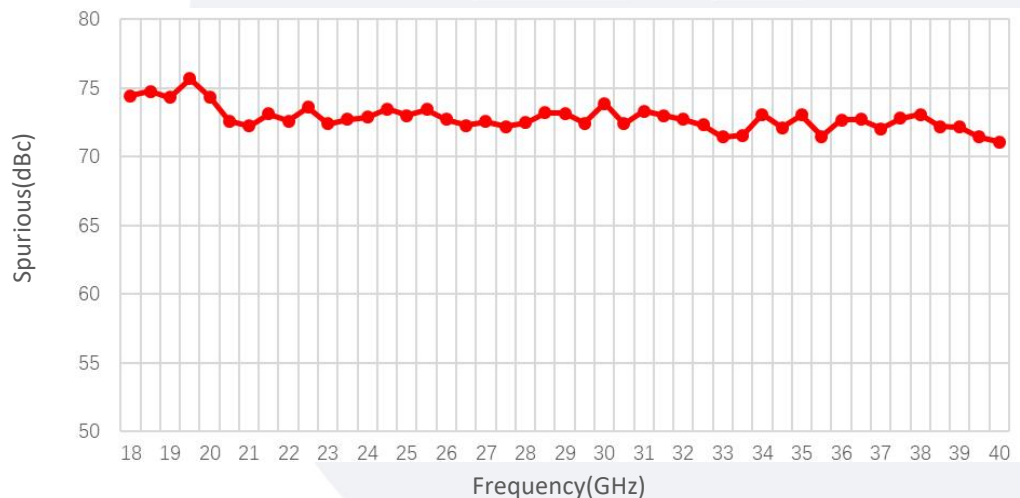
Pout@Pin



Pout@Equal_Pin



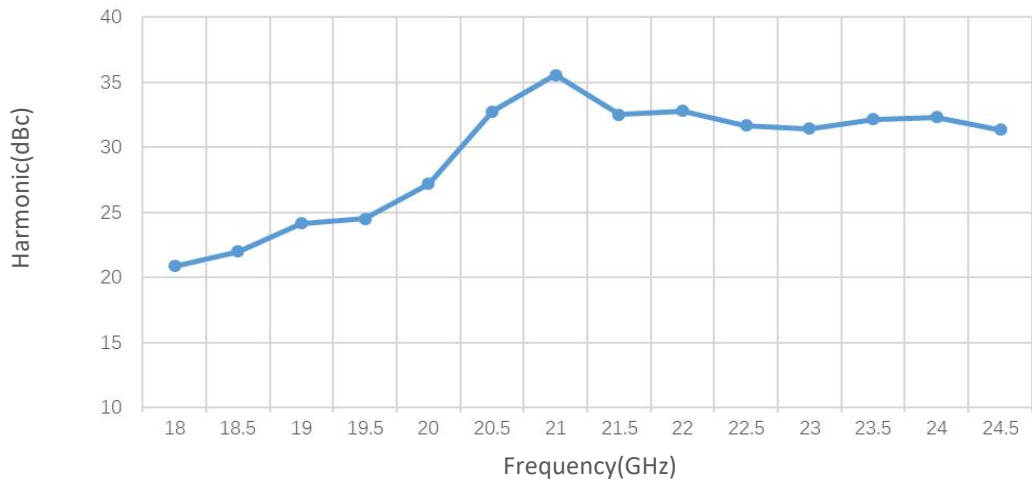
Spurious vs Frequency



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Typical Performance Data:

Harmonic vs Frequency



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