

Power Amplifier

6-18GHz /33dB Gain/36 dBm Psat

Model: TLPA6G18G-37-37

TLPA6G18G-37-37 is a power amplifier with small signal gain of 33 dB and Psat of 36 dBm across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +28 VDC/1.1 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Ultra Wide Band: 6-18GHz
- Gain: 33dB Min
- Output Power Psat: 36dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	6-18			GHz
Gain	33			dB
Output Psat	36			dBm
Spurious			-50	dBc
Harmonic			-10	dBc
DC Voltage		28		V DC
DC Supply Current		1.1		A
Impedance	50			Ohms

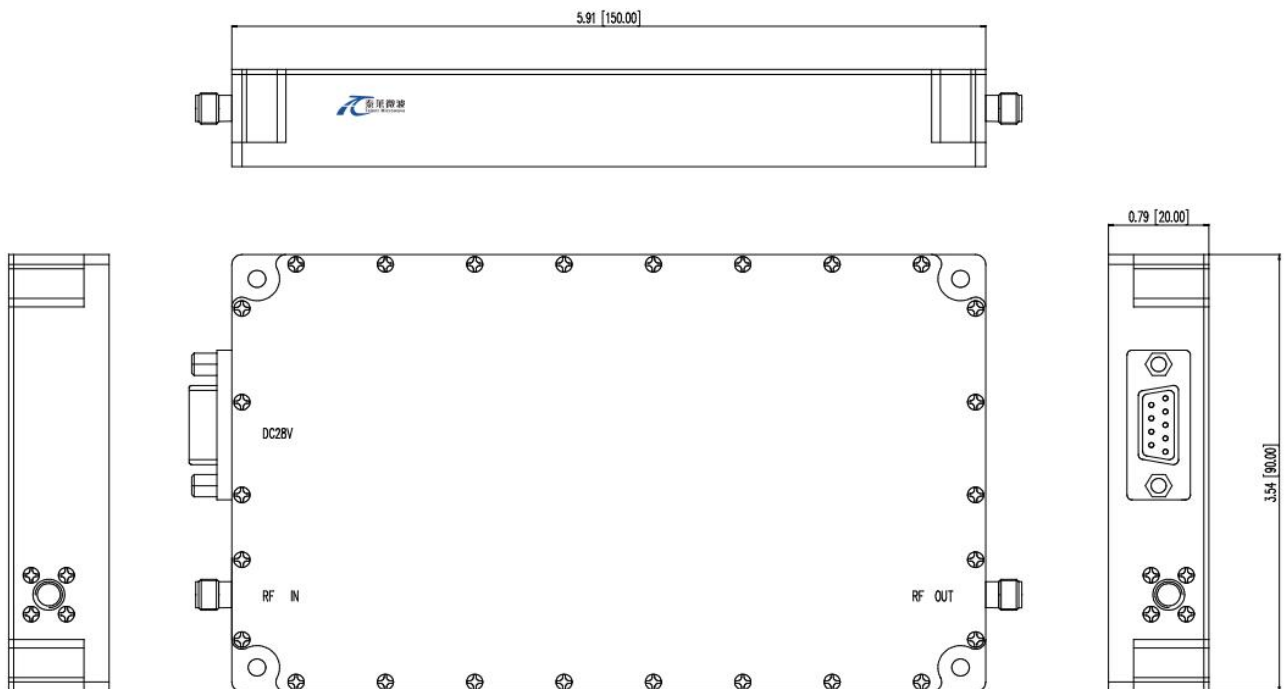
Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	J30J-9ZKP	1-4:+28V 5-9:GND
Size	59.1*35.4*7.9	mm
Weight	500	g

Absolute Maximum Ratings:

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

外形图 Outline Drawing: Unit:mm



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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

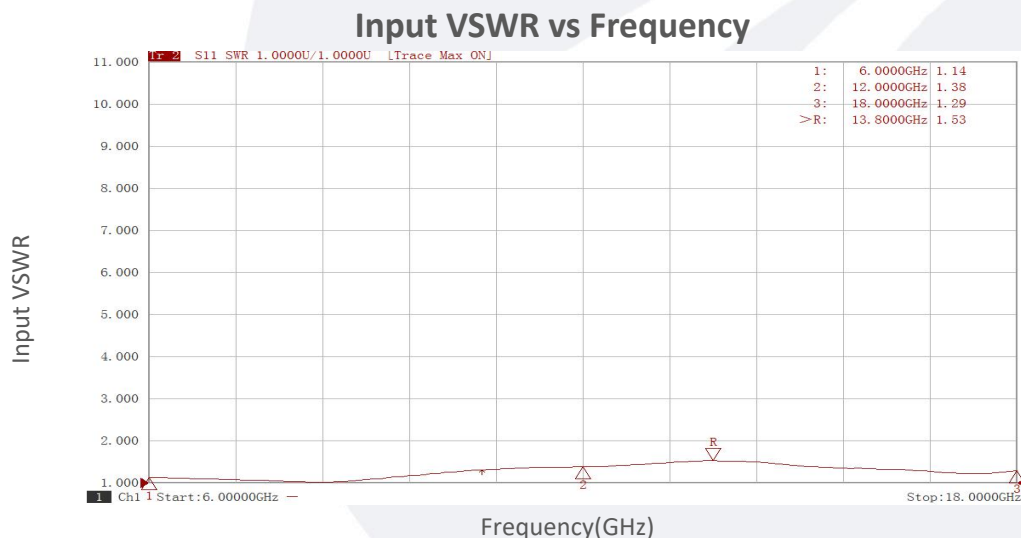
Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+60	°C
Non-operating Temperature*	-50		+70	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA6G18G-37-37	Power amplifier 6-18GHz,Gain:33dB,Psat:36dBm, +28V DC,Without Heatsink	Rev.1.1
TLPA6G18G-37-37-HS	Power amplifier 6-18GHz,Gain:33dB,Psat:36dBm, +28V DC,With Heatsink	Rev.1.1

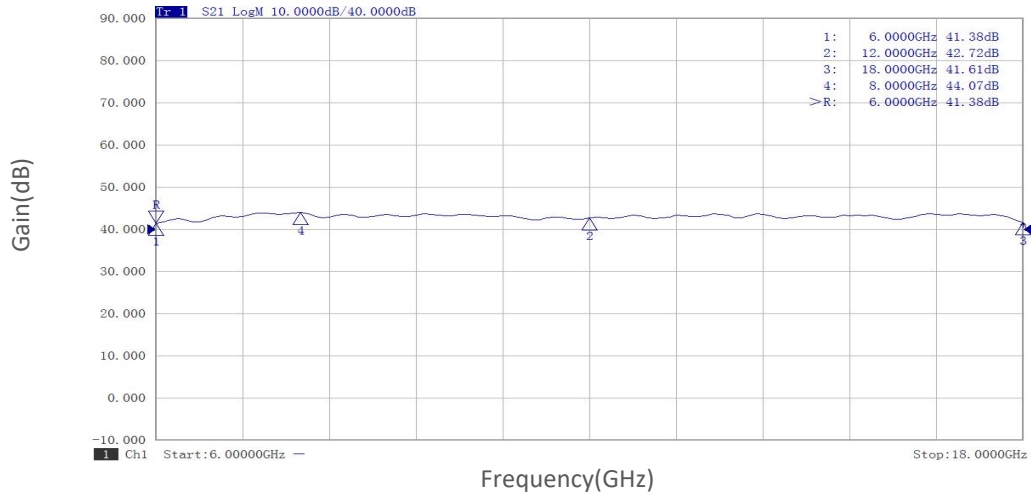
典型曲线 Typical Performance Data:



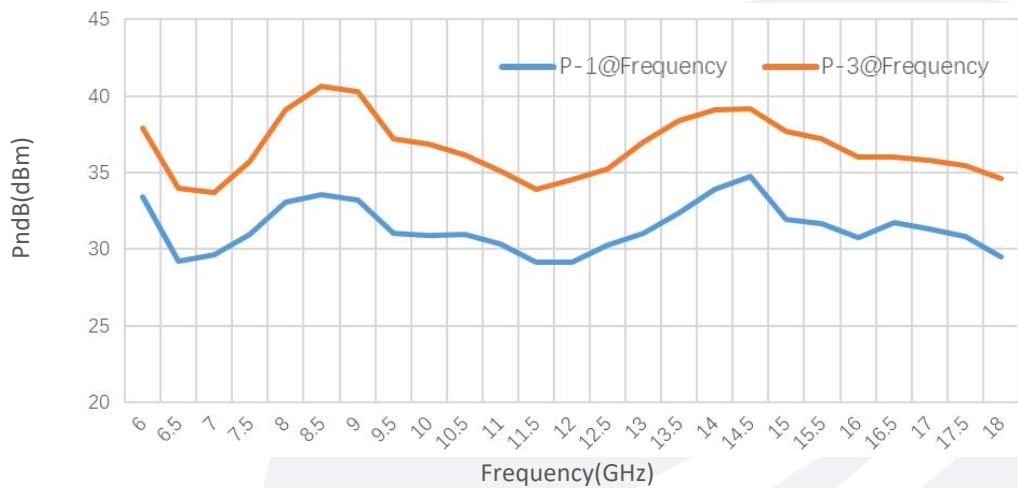
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

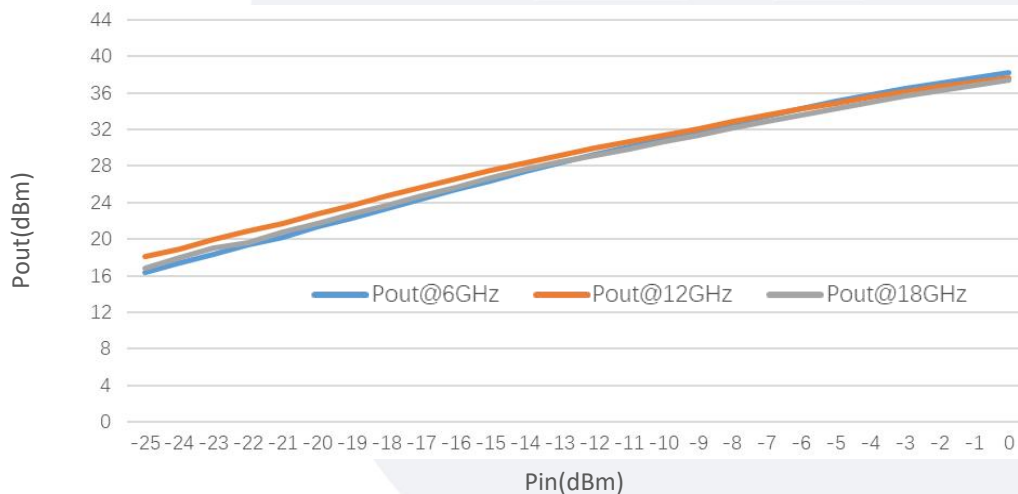
Small Signal Gain vs Frequency



PndB vs Frequency



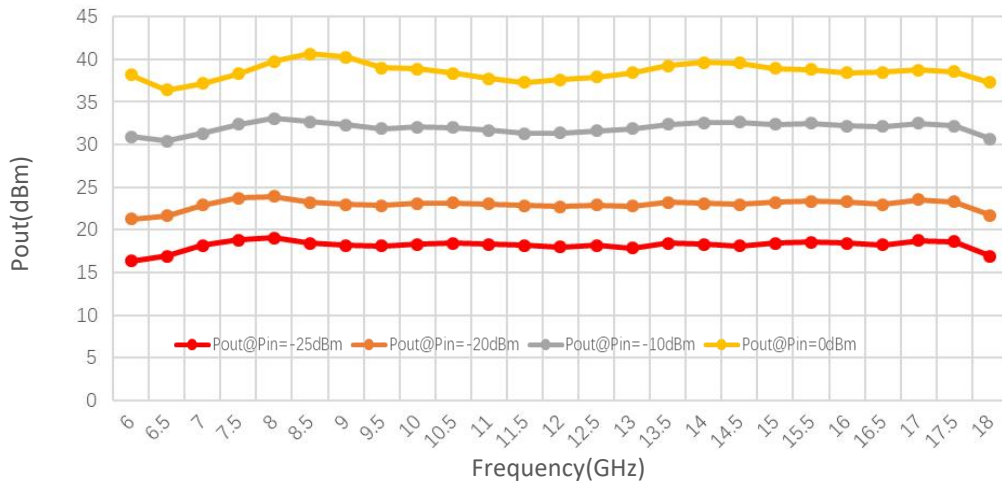
Pout@Pin



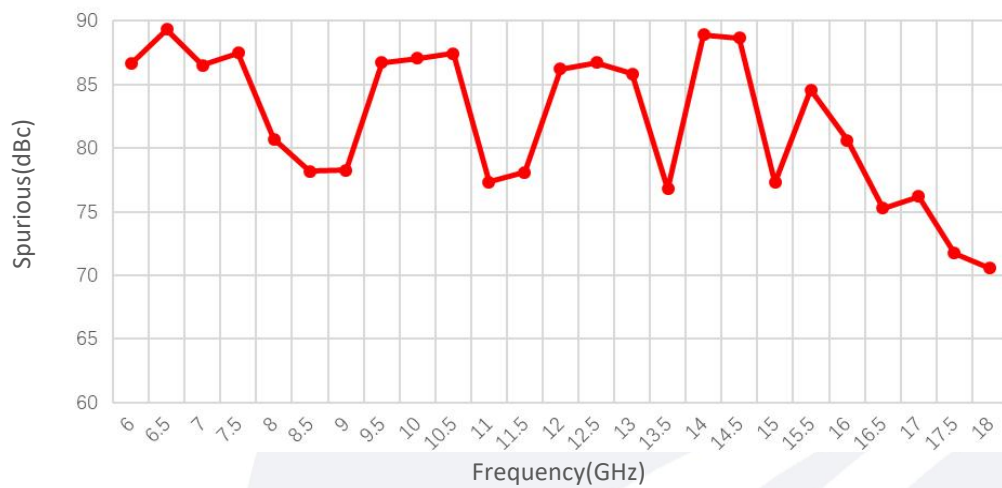
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Typical Performance Data:

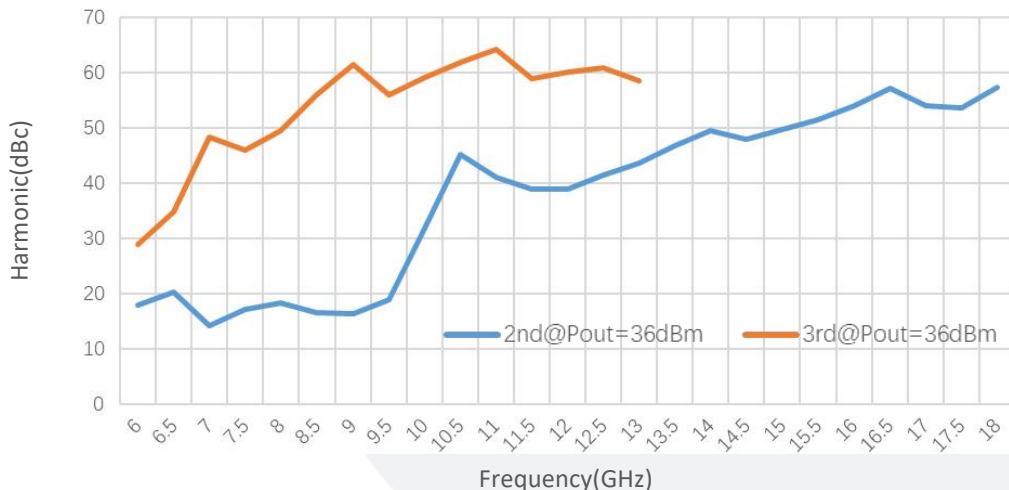
Pout@Equal_Pin



Spurious vs Frequency



Harmonic vs Frequency



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