

Power Amplifier

6-18GHz /21dB Gain/25 dBm Psat

Model: TLPA6G18G-21-25-LC

TLPA6G18G-21-25-LC is a power amplifier with a typical small signal gain of 21 dB and Psat of 25 dBm across the frequency range of 6 to 18 GHz. The DC power requirement for the amplifier is +5 VDC/390 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 6-18GHz
- Small Signal Gain:21 dB Typ
- Output Power Psat: 25 dBm Typ
- 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
Small Signal Gain		21		dB
Gain Flatness		±1.5		dB
Output Psat		25		dBm
Power Added Efficiency		33		%
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+5		V DC
DC Supply Current		390		mA
Impedance		50		Ohms

Mechanical Specifications:

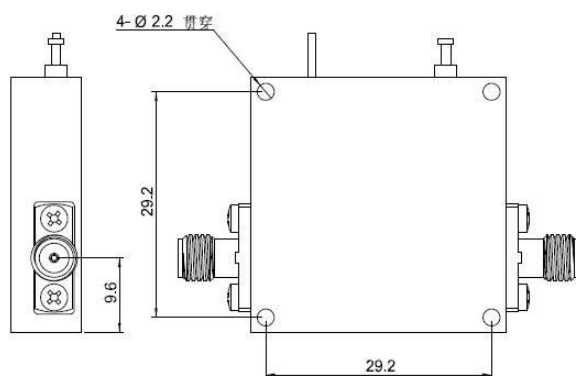
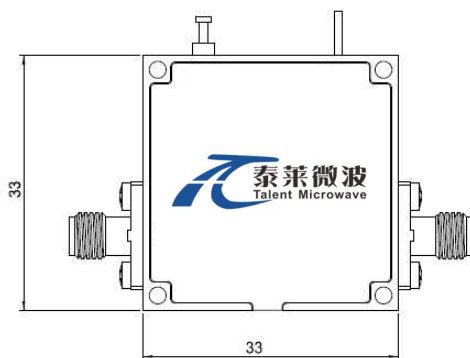
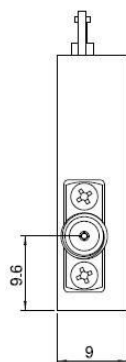
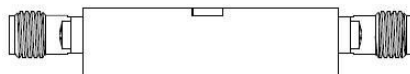
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Size	33*33*9	mm

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+5.5 V
RF Input Power	+17 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Regulatory Compliance:



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

*****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	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			

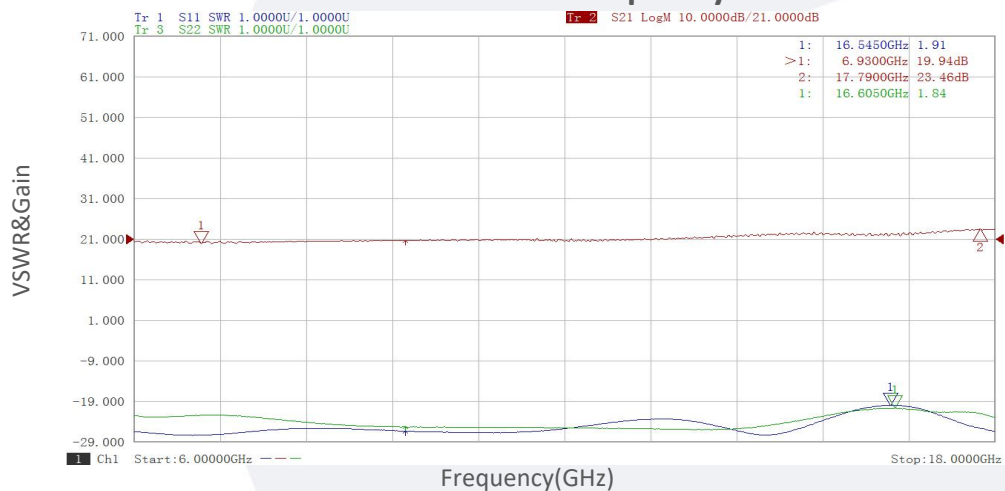
*Note: For a wider temperature range, please consult the manufacturer.

Ordering Information:

Base Number	Description	Revision
TLPA6G18G-21-25-LC	Power amplifier 6-18GHz,Power Gain:21dB,Psat:25dBm, +5V DC,With Heatsink	Rev.1.1

Typical Performance Data:

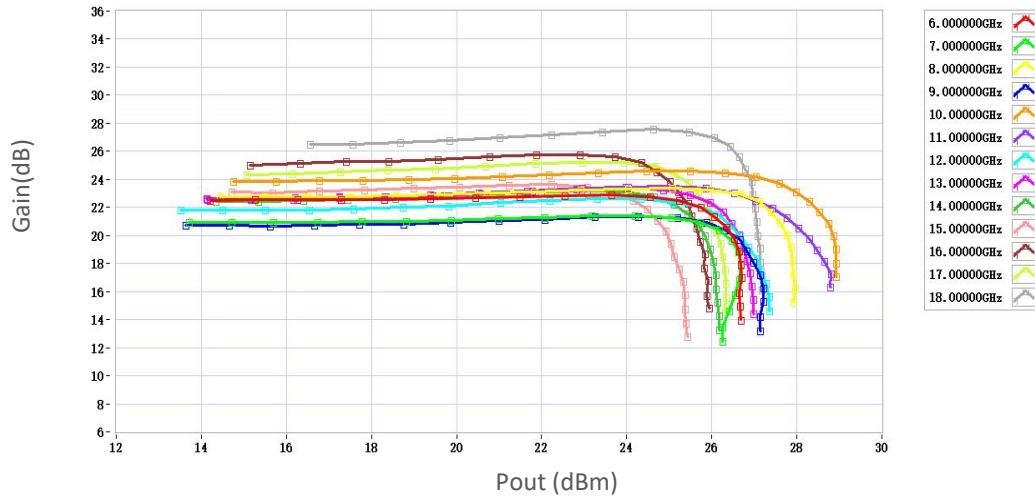
VSWR&Gain vs Frequency



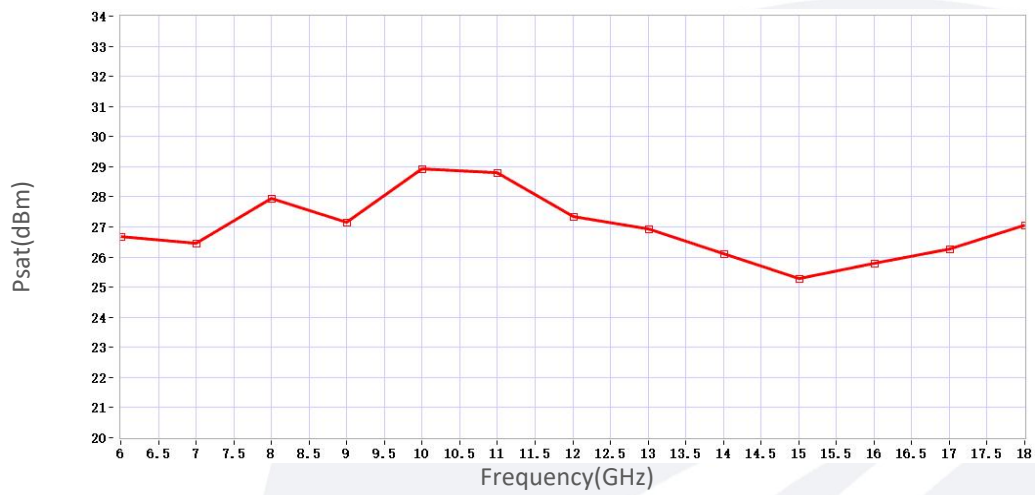
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

Gain vs Output Power



Psat vs Frequency



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