

## Power Amplifier

26.5-40GHz/40dB Gain/40dBm Psat

Model: TLPA26.5G40G-37-37

TLPA26.5G40G-37-37 is a power amplifier with a minimum small signal gain of 40 dB and a typical Psat of 40 dBm across the frequency range of 26.5 to 40 GHz. The DC power requirement for the amplifier is +22 VDC/90W. The input and output port configuration offers coax adapter structure with 2.92mm female.

### Features:

- Frequency range: 26.5-40GHz
- Gain: 40dB Min
- Output Power Psat: 40dBm 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	26.5-40			GHz
Small Signal Gain	40			dB
Psat Flatness		±1.5		dB
Output P1dB		37		dB
Output Psat		40		dBm
Spurious			-50	dBc
Harmonic			-25	dBc
Input VSWR			2	:1
DC Voltage		22		V DC
Power Consumption			90	W
Impedance	50			Ohms

### Mechanical Specifications:

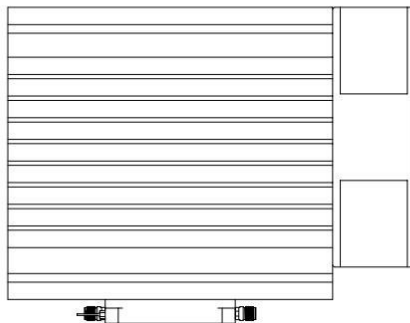
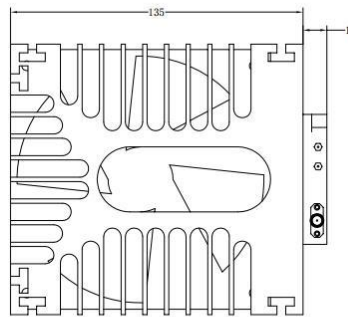
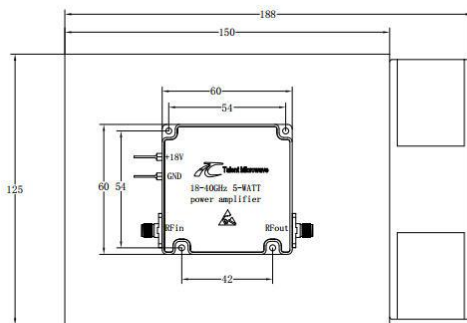
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Supply Connector	Feedthru capacitors	
Size	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	≤200	g

### Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+24 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

### Outline Drawing:

Unit:mm



### Regulatory Compliance:



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



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

### Environmental Conditions:

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

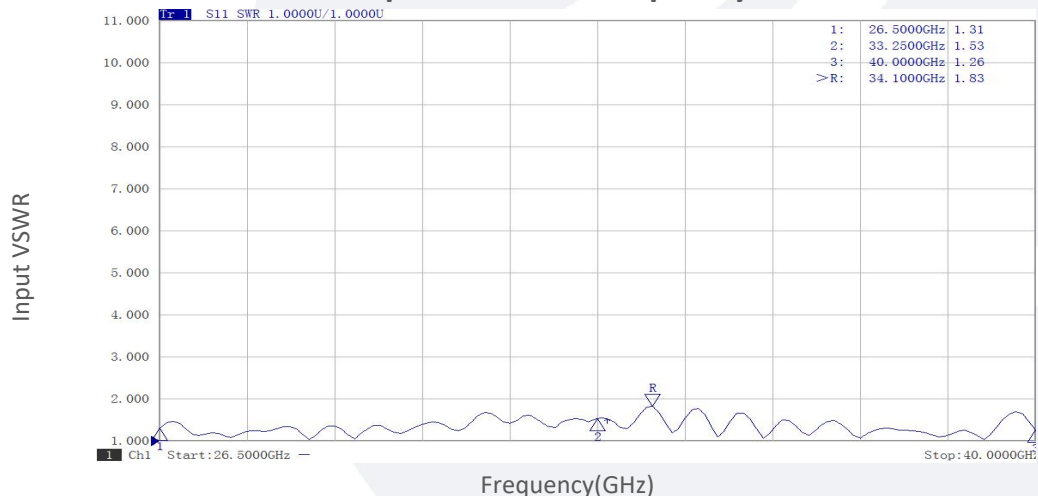
\*Note: For a wider temperature range, please consult the manufacturer.

### Ordering Information:

Base Number	Description	Revision
TLPA26.5G40G-37-37	Power amplifier 26.5-40GHz, Gain:40dB,Psat:40dBm,+22V DC,Without Heatsink	Rev.1.1
TLPA26.5G40G-37-37-HS	Power amplifier 24-30GHz, Gain:40dB,Psat:40dBm,+22V DC,With Heatsink	Rev.1.1

### Typical Performance Data:

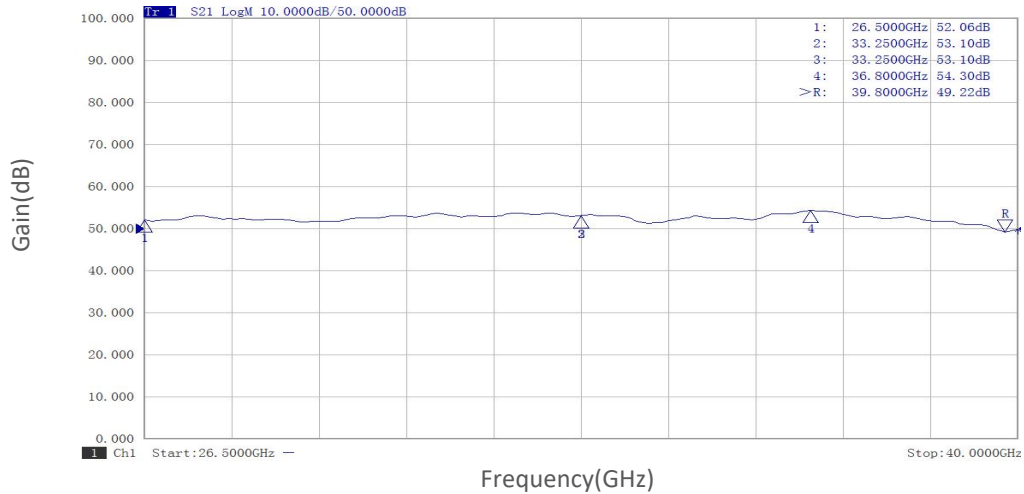
#### Input VSWR vs Frequency



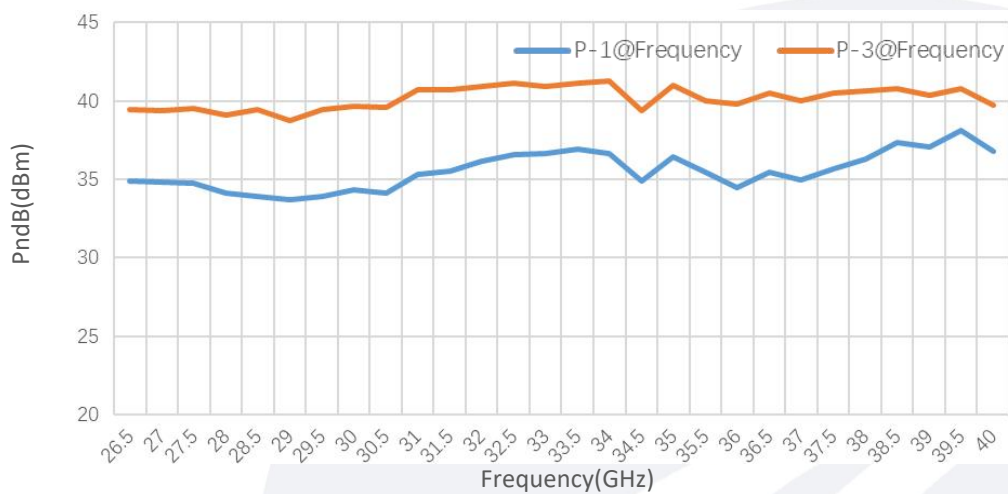
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

## Typical Performance Data:

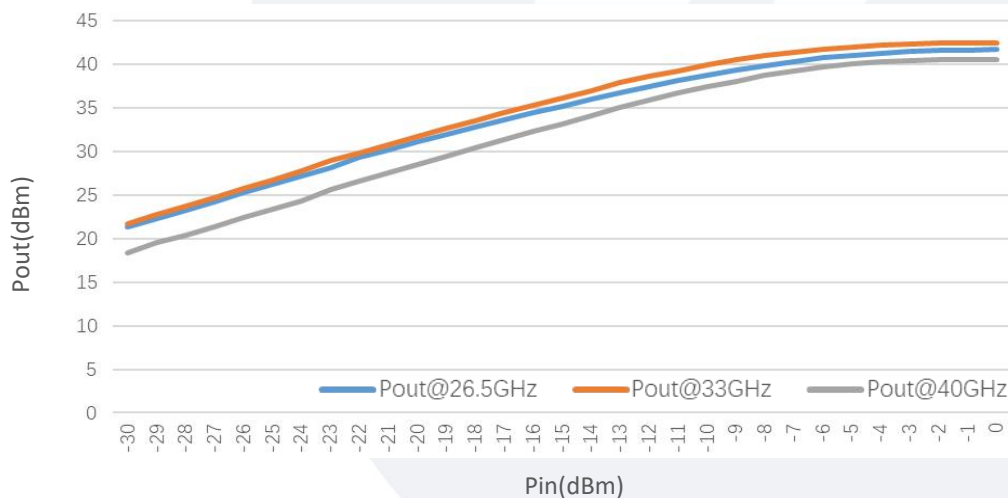
### Small Signal Gain vs Frequency



### PndB vs Frequency



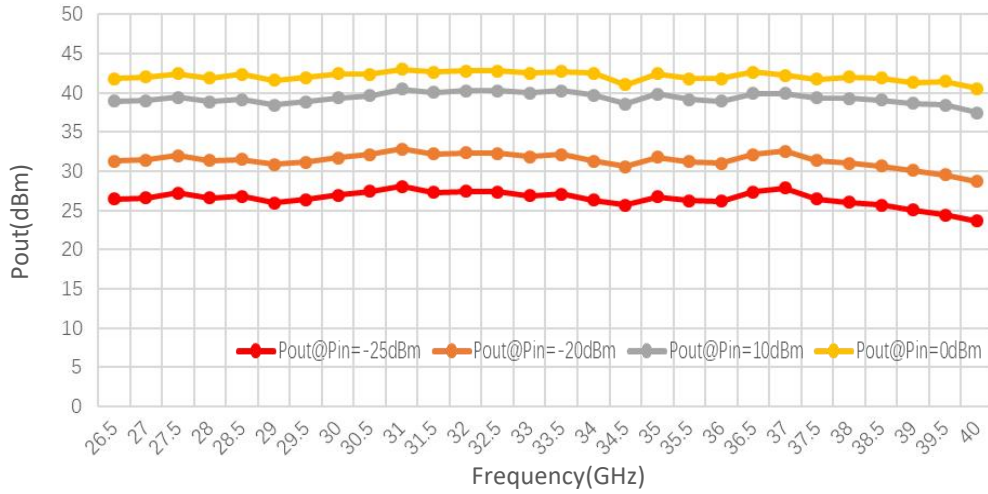
### Pout@Pin



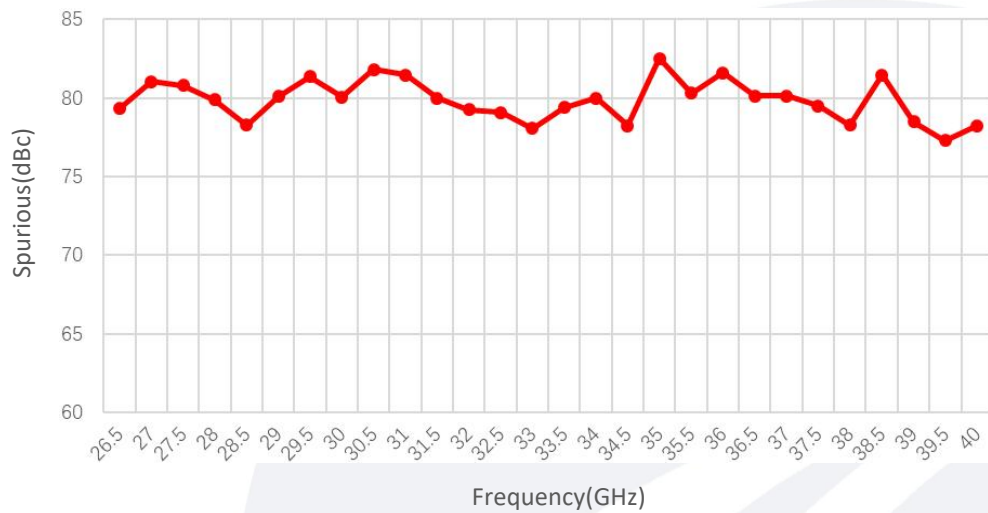
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## Typical Performance Data:

### Pout@Equal\_Pin



### Spurious vs Frequency



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