

Power Amplifier

8-26.5GHz/42dB Gain/27dBm Psat

Model: TLPA8G26.5G-40-25

TLPA8G26.5G-40-25 is a power amplifier with a typical small signal gain of 42 dB and a nominal Psat of 27 dBm across the frequency range of 8 to 26.5 GHz. The DC power requirement for the amplifier is +12 VDC/420 mA. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 8-26.5GHz
- Gain: 42dB Typ
- Output Power Psat: 27dBm Typ
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	8-26.5			GHz
小信号增益 Small Signal Gain	40	42		dB
增益平坦度 Gain Flatness		±2.5		dB
线性输出功率 Output P1dB				dBm
饱和输出功率 Output Psat	25	27		dBm
输入驻波 Input VSWR		2	2.5	:1
输出驻波 Output VSWR		1.8	2.4	:1
直流电压 DC Voltage	10	12	15	V DC
直流电流 DC Supply Current		420		mA
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

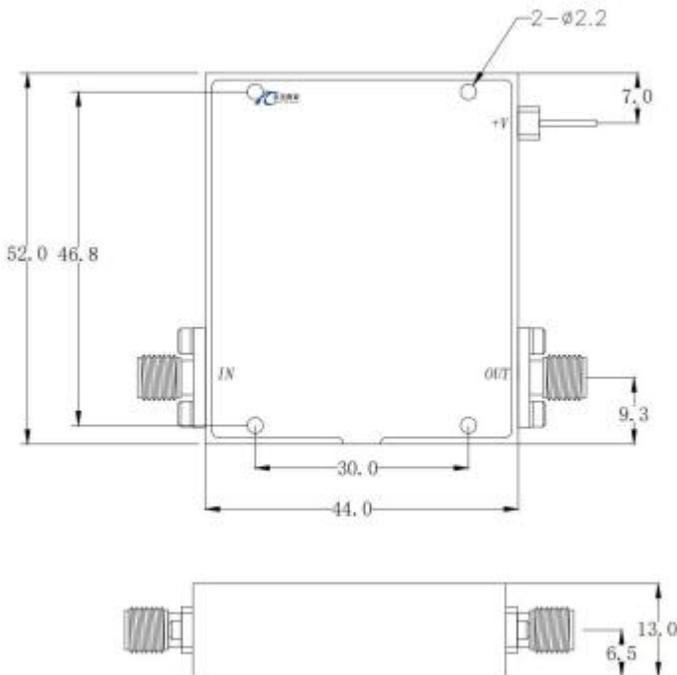
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
直流偏置 DC Bias	Solder Pin	
尺寸 Size	52*44*13	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	TBD
输入功率 RF Input Power	TBD
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm



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

温度环境 Environmental Conditions:

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

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

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLPA8G26.5G-40-25	Power amplifier 8-26.5GHz, Gain:42dB,Psat:27dBm,+12V DC,Without Heatsink	Rev.1.1
TLPA8G26.5G-40-25-HS	Power amplifier 8-26.5GHz, Gain:42dB,Psat:27dBm,+12V DC,With Heatsink	Rev.1.1

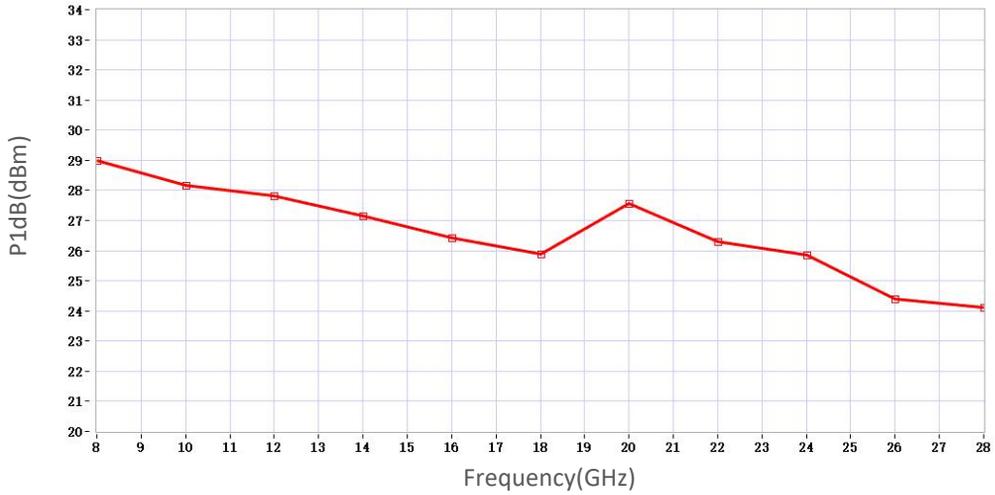
典型曲线 Typical Performance Data:

VSWR&Gain vs Frequency

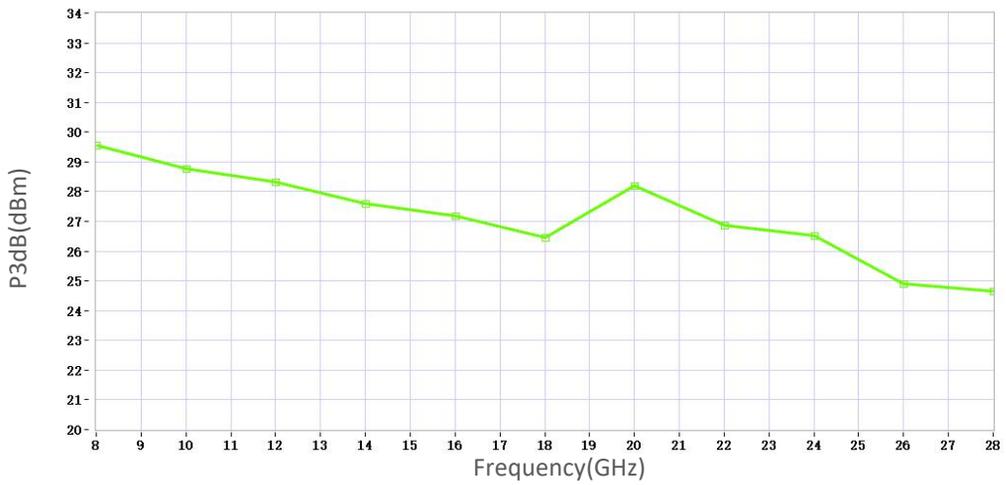
VSWR&Gain

典型曲线 Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



Psat vs Frequency

Psat (dBm)