



Power Amplifier

Model: PA-8G-26G5-0.5

8-26.5GHz 0.5W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 8-26.5GHz
- High output power at saturation, 0.5W Typ.
- High gain, 42 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-8G-26G5-0.5 is a power amplifier with a typical small signal gain of 42 dB and a nominal P_{sat} of 0.5W across the frequency range of 8 to 26.5GHz. 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.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	8		26.5	GHz
Small Signal Gain	40	42		dB
Small Signal Gain Flatness		±2.5		dB
Output Psat	25	27		dBm
Input VSWR		2	2.5	:1
Output VSWR		1.8	2.4	:1
DC Voltage	+10	+12	+15	V DC
DC Supply Current		420		mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +60°C	
Non-operating Temperature*	-50°C to +70°C	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
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	
Dimensions W x H x D	44*52*13	mm

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

Absolute Maximum Ratings:

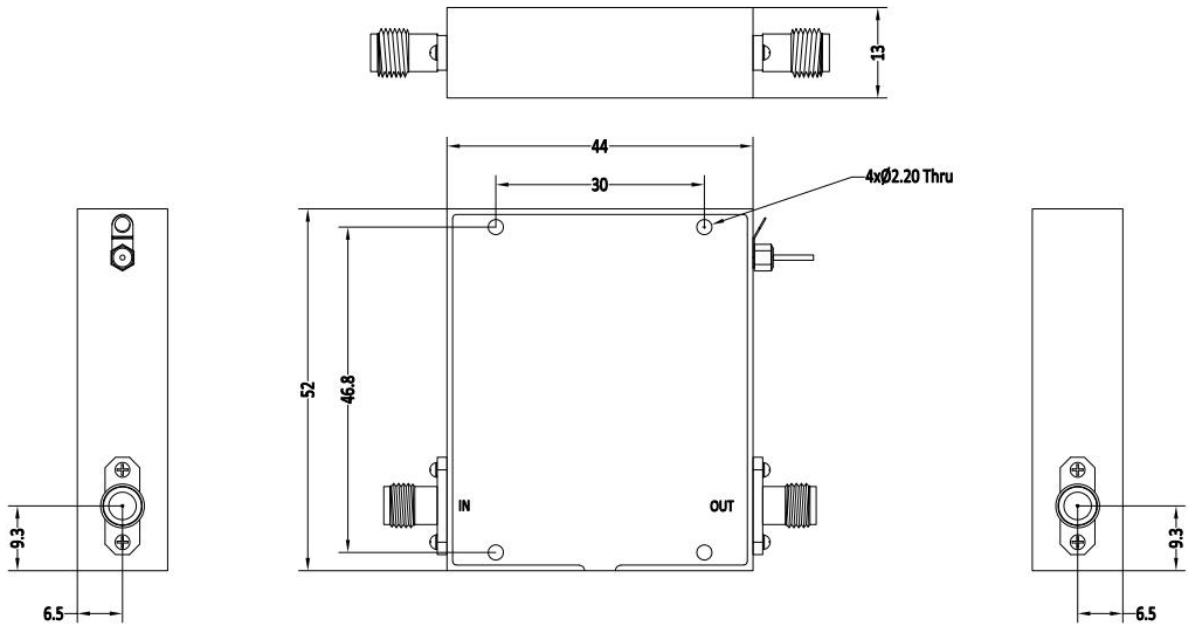
Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	TBD
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-8G-26G5-0.5



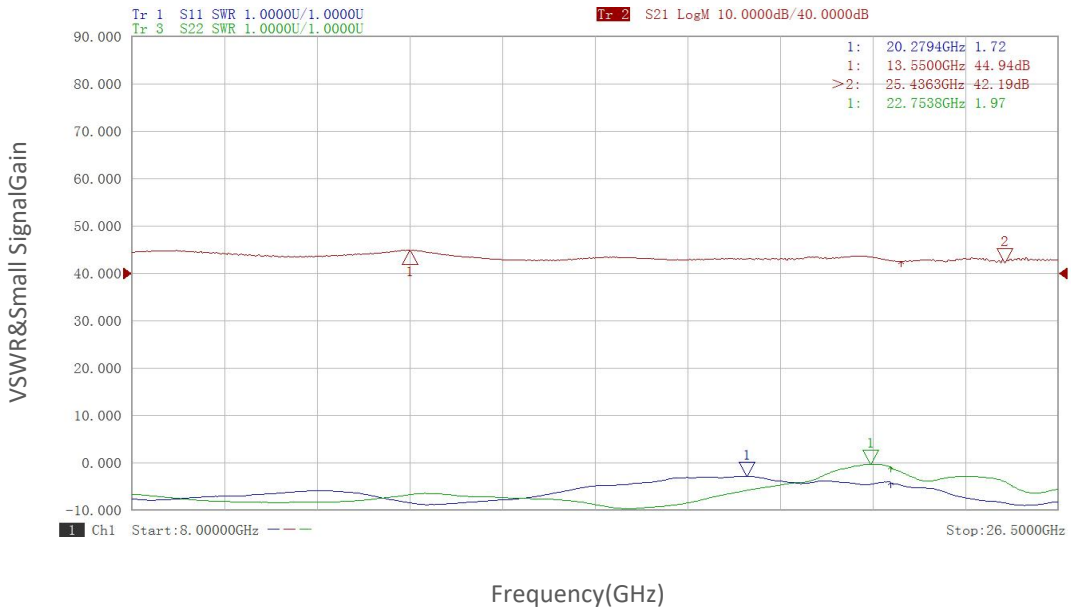
Ordering Information:

Base Number	Description	Optional
PA-8G-26G5-0.5	Power Amplifier, 8-26.5GHz, Gain:42dB,Psat:0.5W,+12V DC	Without Heatsink
PA-8G-26G5-0.5-HS	Power Amplifier, 8-26.5GHz, Gain:42dB,Psat:0.5W,+12V DC	With Heatsink

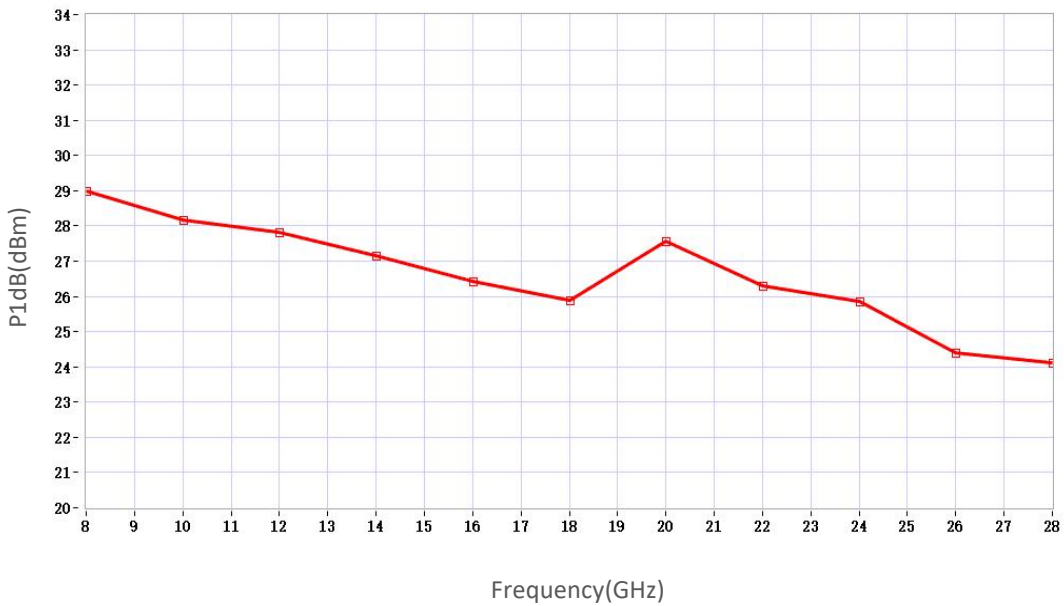


Typical Performance Data:

VSWR&Small Signal Gain vs Frequency



P1dB vs Frequency

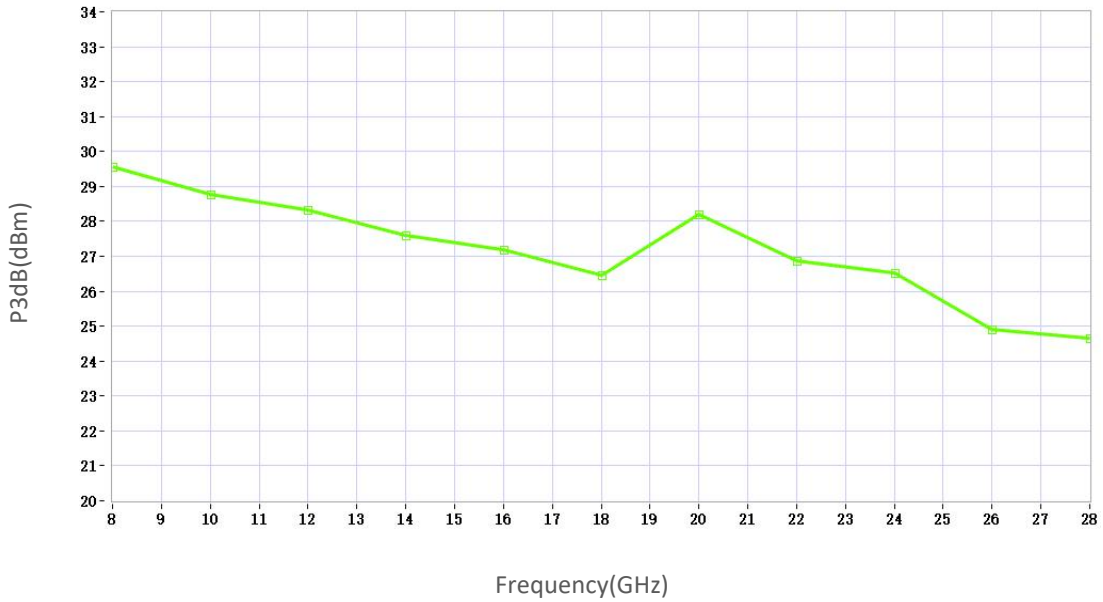


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.



Typical Performance Data:

P3dB vs Frequency



Psat vs Frequency



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