



Power Amplifier

Model: PA-6G-18G-1-H

6-18GHz 1W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 6-18GHz
- High output power at saturation, 1W Min.
- High gain, 40 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-6G-18G-1-H is a power amplifier with a typical power gain of 40 dB and a minimum P_{sat} of 1W across the frequency range of 6 to 18GHz. The DC power requirement for the amplifier is +8 VDC/1.4 A. 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	6		18	GHz
Power Gain		40		dB
Power Gain Flatness		±2.5		dB
Output Psat	30	33		dBm
Input VSWR		2		:1
Output VSWR		2		:1
DC Voltage		+8		V DC
DC Supply Current		1.4		A
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:

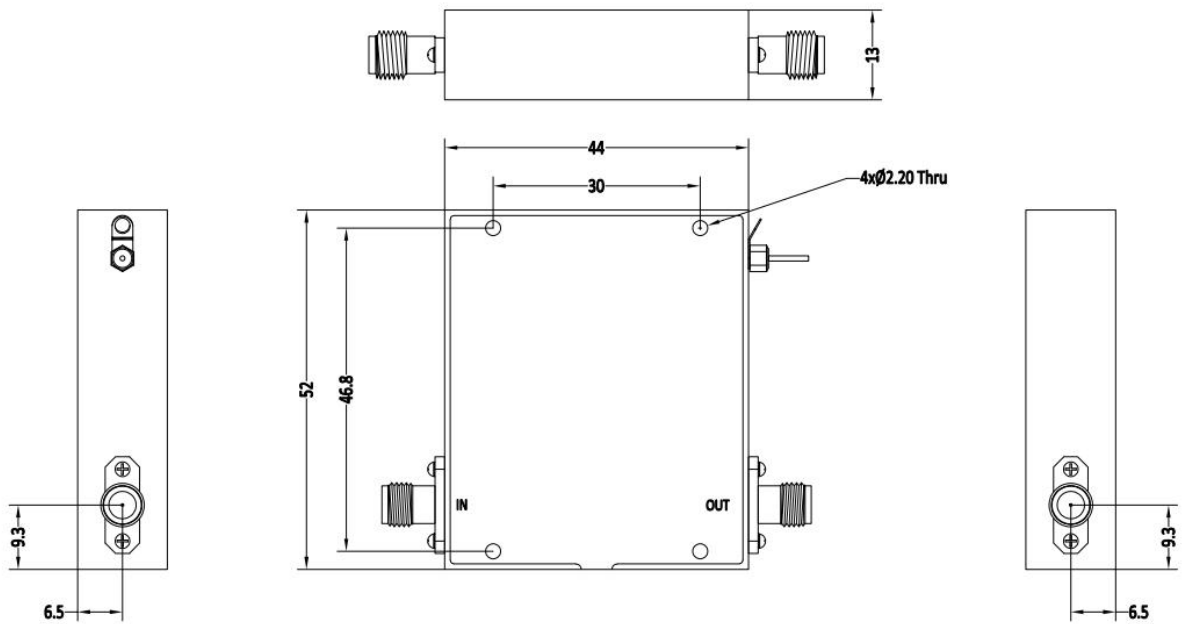
Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	TBD
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-6G-18G-1-H



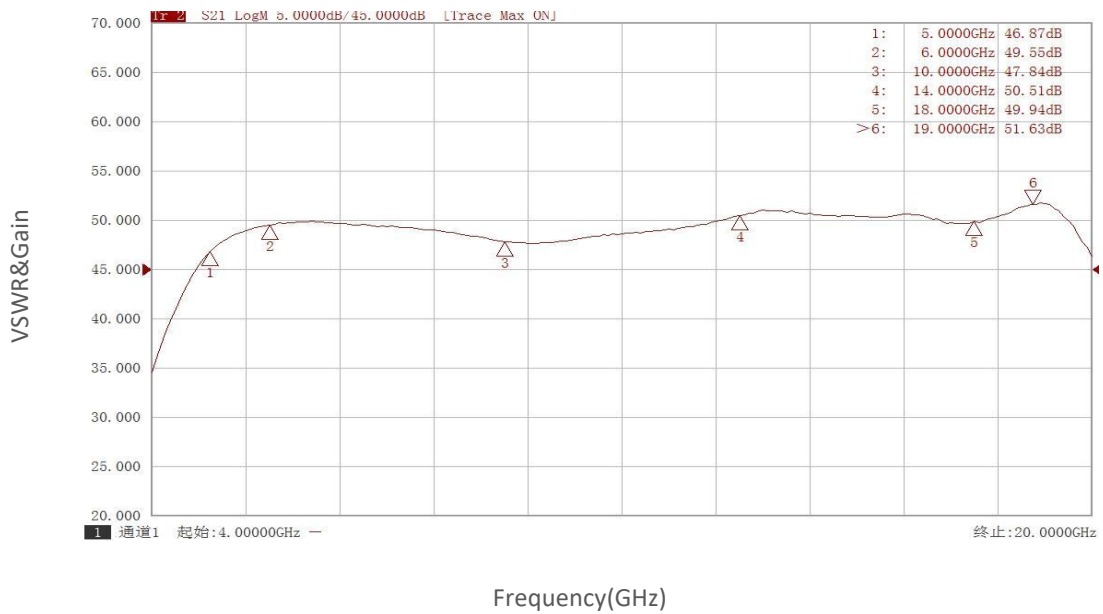
Ordering Information:

Base Number	Description	Optional
PA-6G-18G-1-H	Power Amplifier, 6-18GHz, Gain:40dB,Psat:1W,+8V DC	Without Heatsink
PA-6G-18G-1-H-HS	Power Amplifier, 6-18GHz, Gain:40dB,Psat:1W,+8V DC	With Heatsink

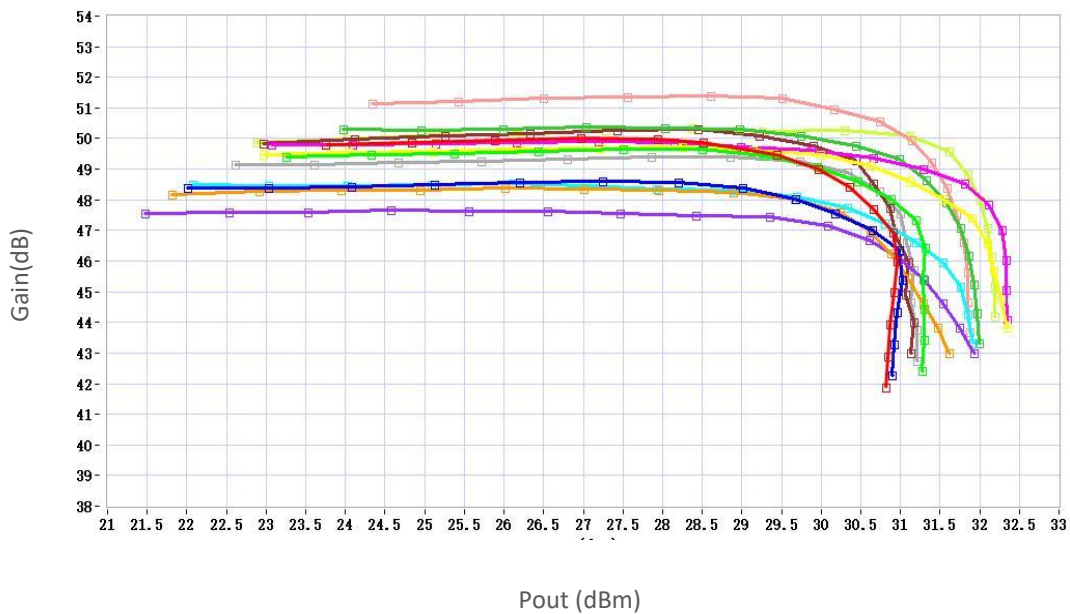


Typical Performance Data:

VSWR&Gain vs Frequency



Gain vs Output Power

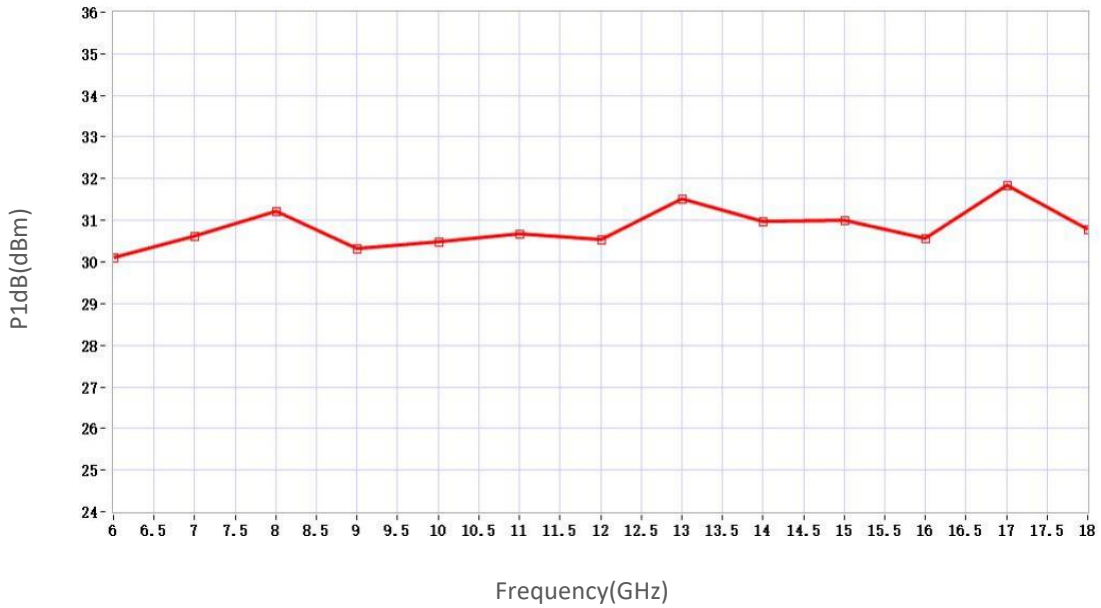


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

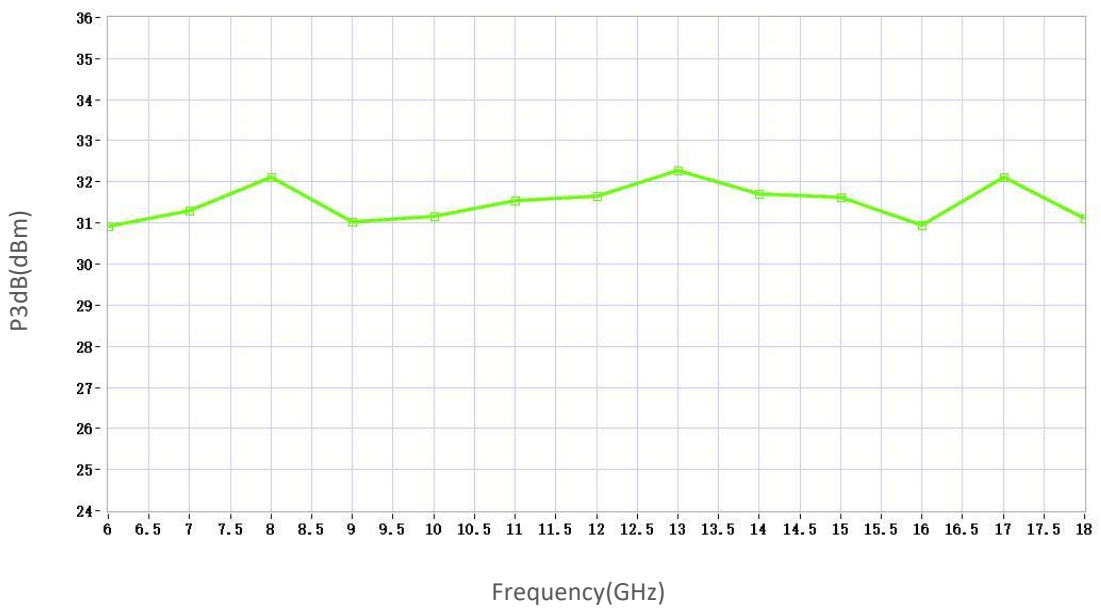


Typical Performance Data:

P1dB vs Frequency



P3dB vs Frequency



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