Power Amplifier

Model: PA-0G5-8G-2

0.5-8GHz 2W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 0.5-8GHz
- High output power at saturation, 2W Typ.
- High gain, 33dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-0G5-8G-2 is a power amplifier with a minimum small signal gain of 33 dB and a nominal Psat of 2W across the frequency range of 0.5 to 8GHz. The DC power requirement for the amplifier is +28 VDC/500 mA. The input and output port configuration offers coax adapter structure with SMA female.

Electrical Specifications at 25℃:

Parameter	Min	Typ	Max	Units
Frequency range	0.5		8	GHz
Small Signal Gain	33	35		dB
Small Signal Gain Flatness		±3		dB
Output Psat	32	33		dBm
Harmonic			-10	dBc
Spurious			-60	dBc
Input VSWR		1.5	2	:1
DC Voltage	+26	+28	+30	V DC
DC Supply Current		500	1200	mA
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temerature*	-40℃ to +60℃	
Non-operating Temperature*	-50℃ to +70℃	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	Solder Pin	
Altitude	30,000	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	90.2*70*15	mm

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

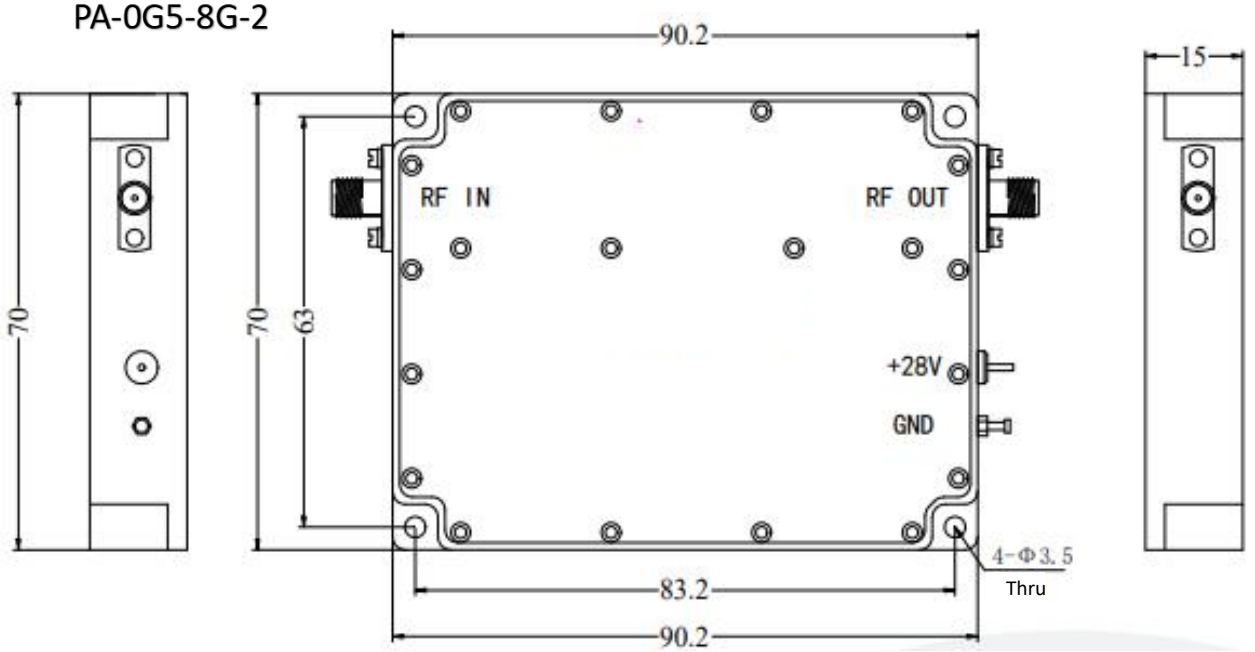
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-0G5-8G-2

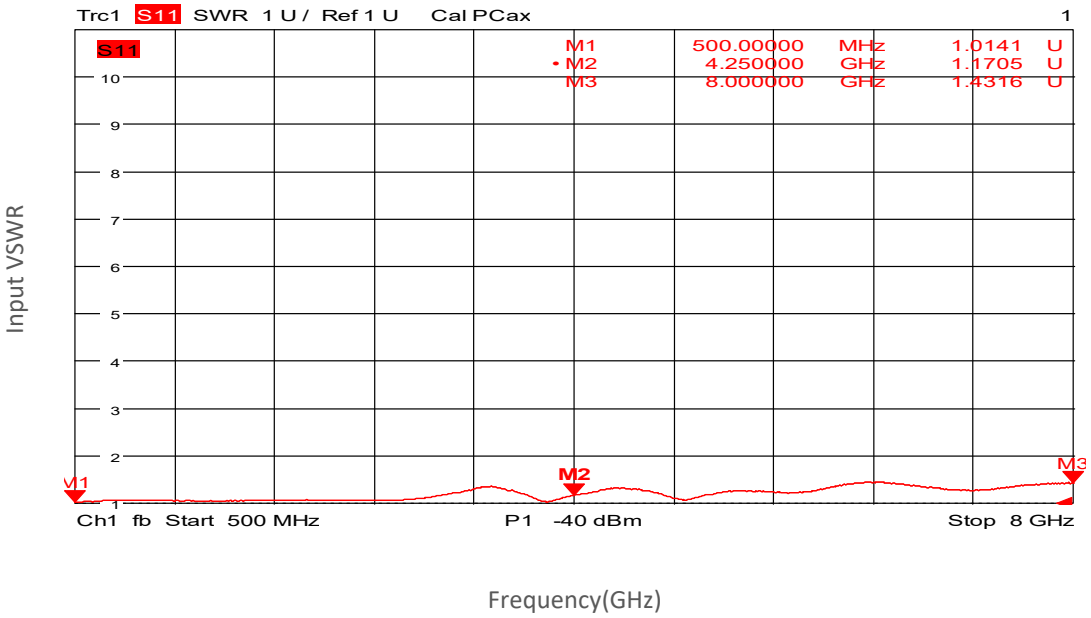


Ordering Information:

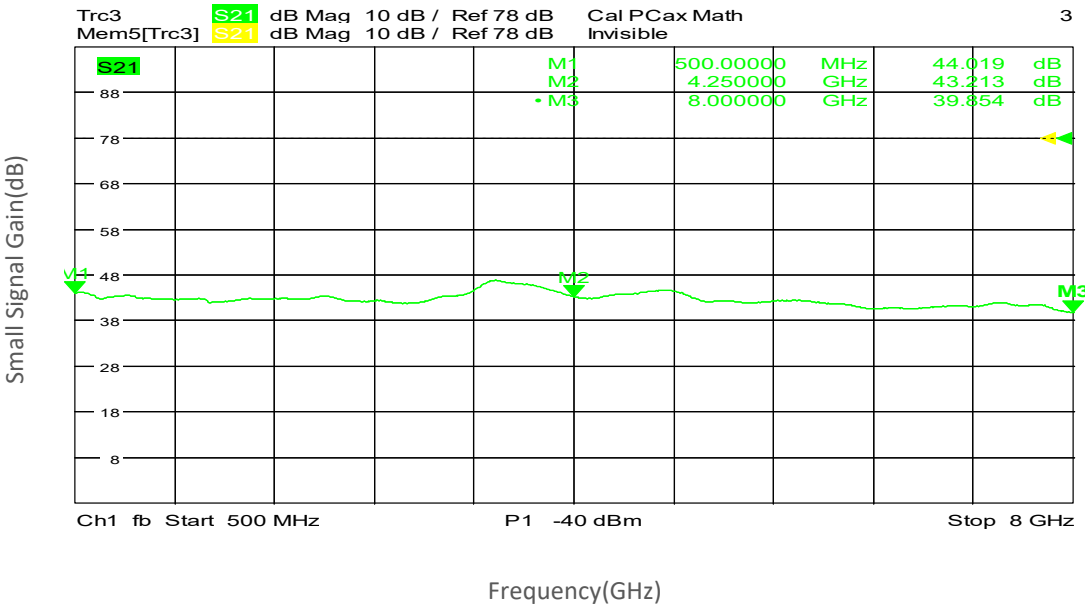
Base Number	Description	Optional
PA-0G5-8G-2	Power Amplifier, 0.5-8GHz, Gain:33dB,Psat:2W,+28V DC	Without Heatsink
PA-0G5-8G-2-HS	Power Amplifier, 0.5-8GHz, Gain:33dB,Psat:2W,+28V DC	With Heatsink

Typical Performance Data:

Input VSWR vs Frequency



Small Signal 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.

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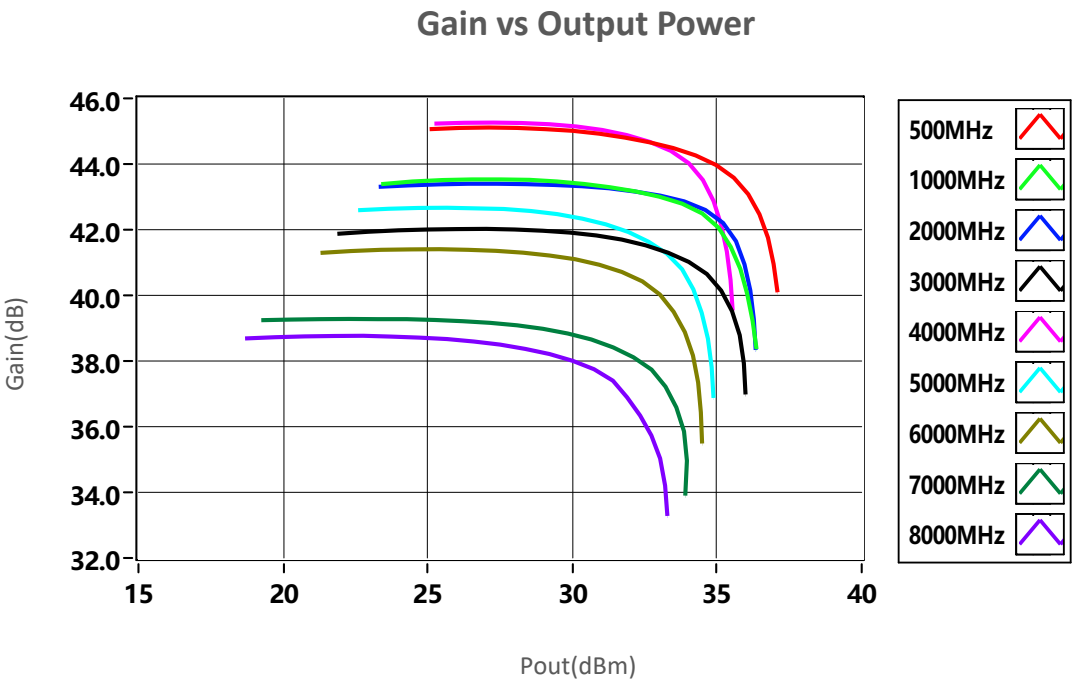

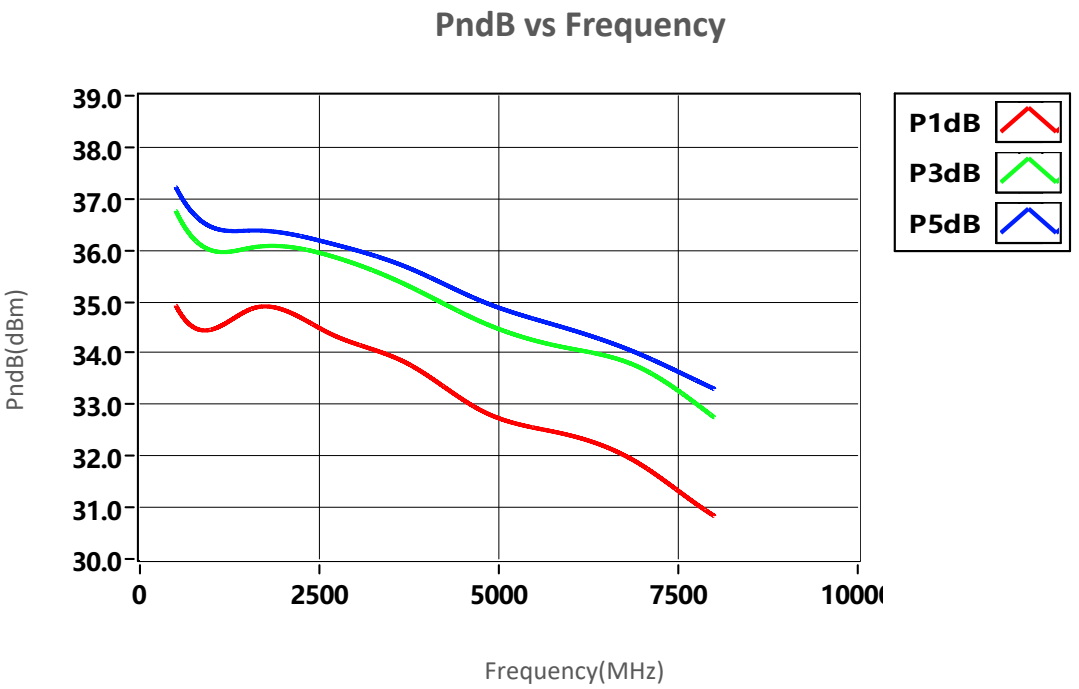

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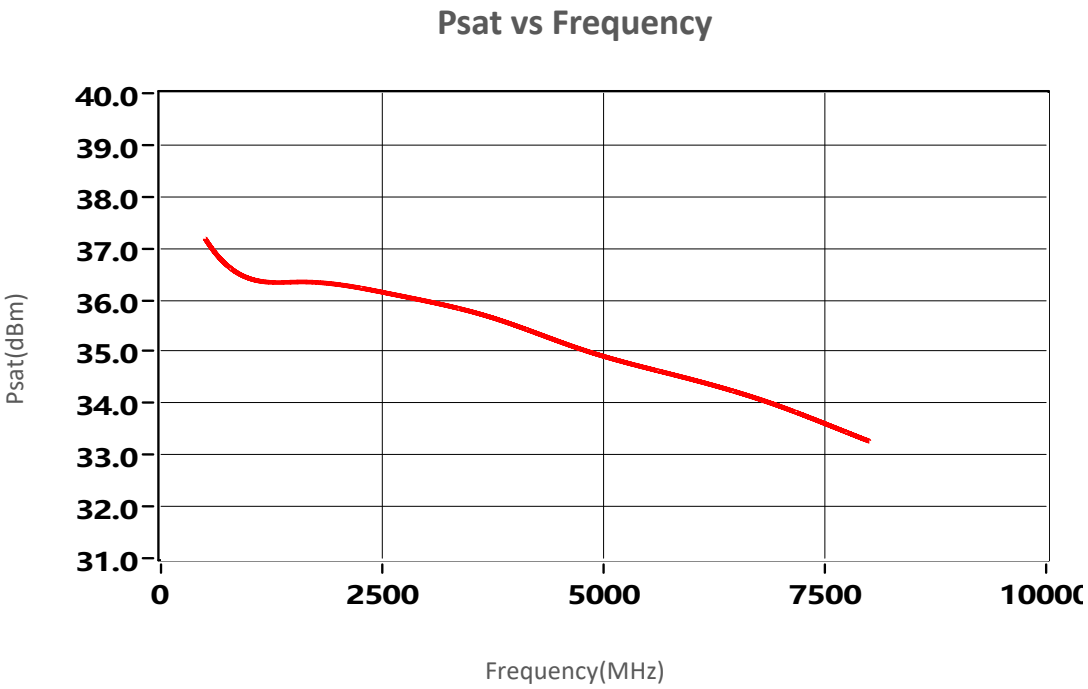

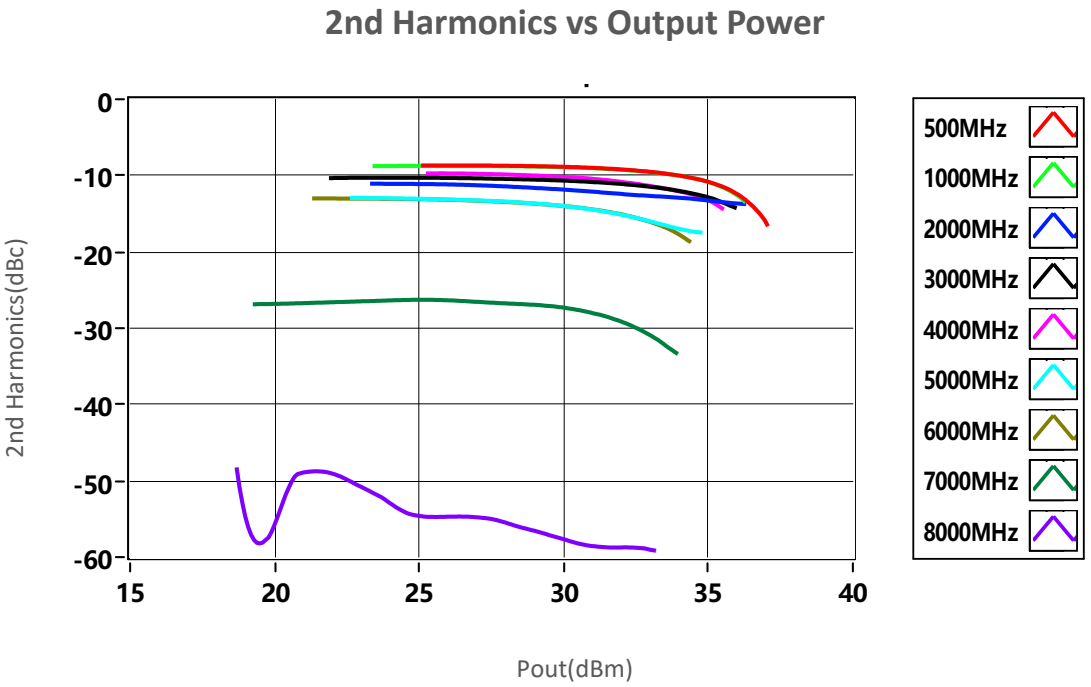

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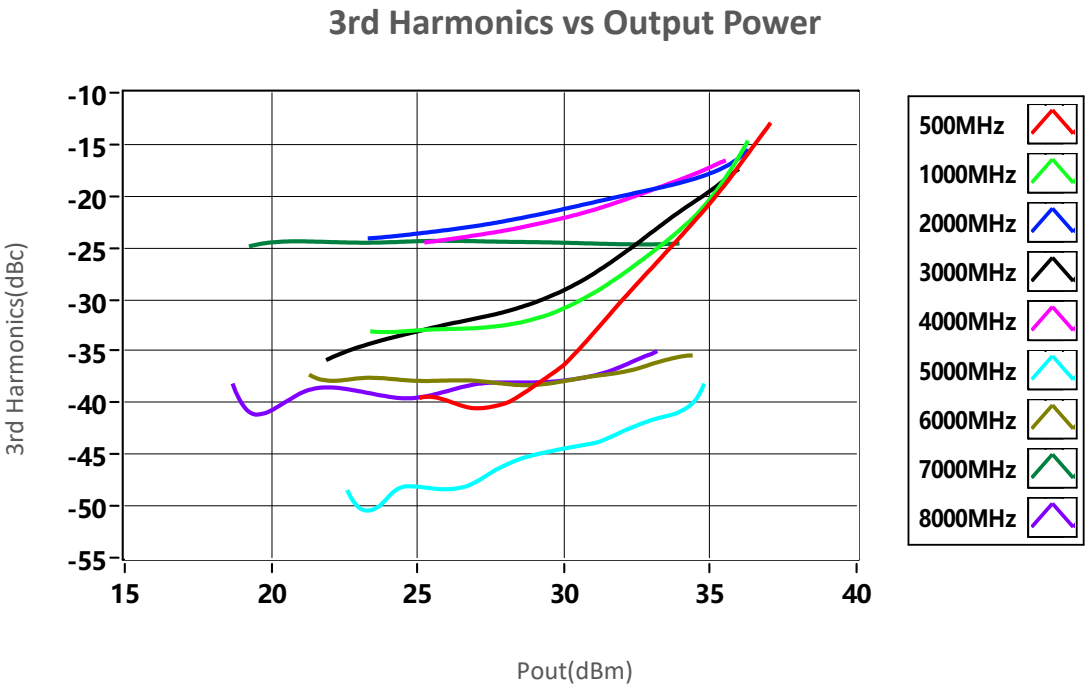

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