



Power Amplifier

Model: PA-2G4-2G5-50

2.4-2.5GHz 50W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 2.4-2.5GHz
- High output power at saturation, 50W Min.
- High gain, 47 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-2G4-2G5-50 is a power amplifier with a typical small signal gain of 47 dB and a minimum Psat of 50W across the frequency range of 2.4 to 2.5 GHz. The DC power requirement for the amplifier is +28 VDC/12 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	2.4		2.5	GHz
Small Signal Gain	40	47		dB
Gain Flatness			±1	dB
Output Psat	47			dBm
Harmonics		-12		dBc
Input VSWR		1.5	2	:1
DC Voltage		+28		V DC
DC Supply Current		12		A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-20°C to +50°C	
Non-operating Temperature*	-30°C to +60°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	170*94*20	mm
Weight	150	g

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

Absolute Maximum Ratings:

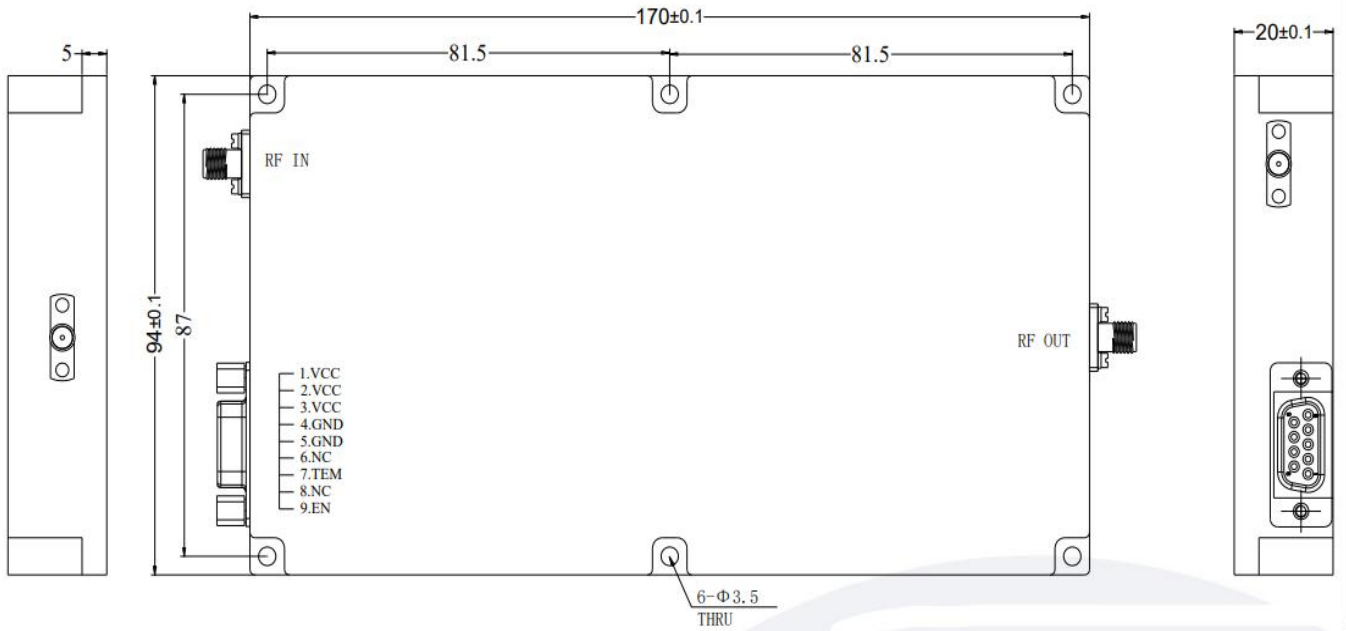
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-2G4-2G5-50



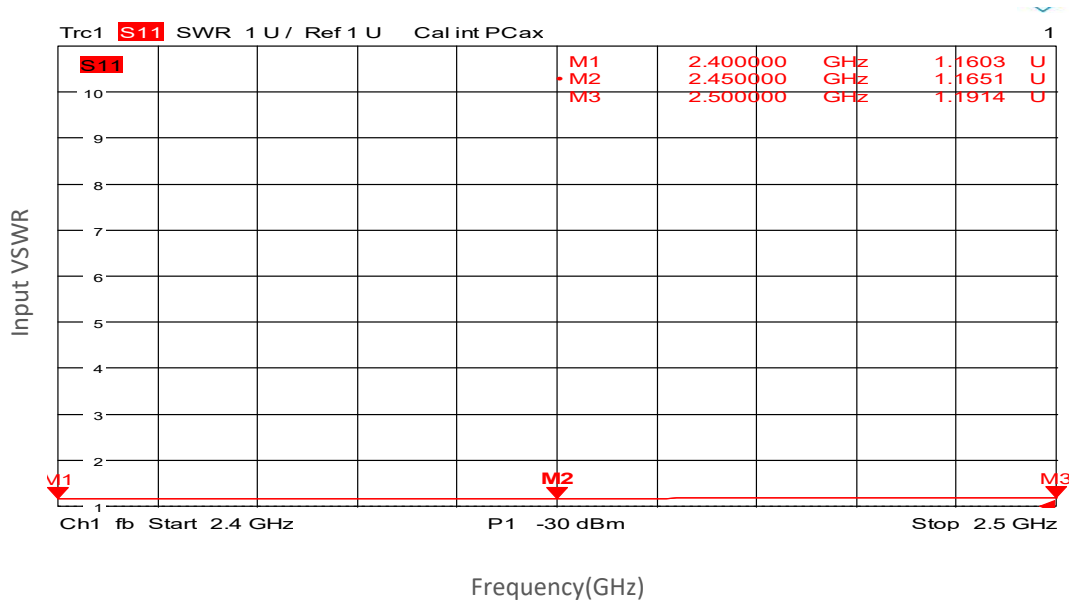
Ordering Information:

Base Number	Description	Optional
PA-2G4-2G5-50	Power Amplifier, 2.4-2.5GHz, Gain:47dB,Psat:50W,+28V DC	Without Heatsink
PA-2G4-2G5-50-HS	Power Amplifier, 2.4-2.5GHz, Gain:47dB,Psat:50W,+28V DC	With Heatsink

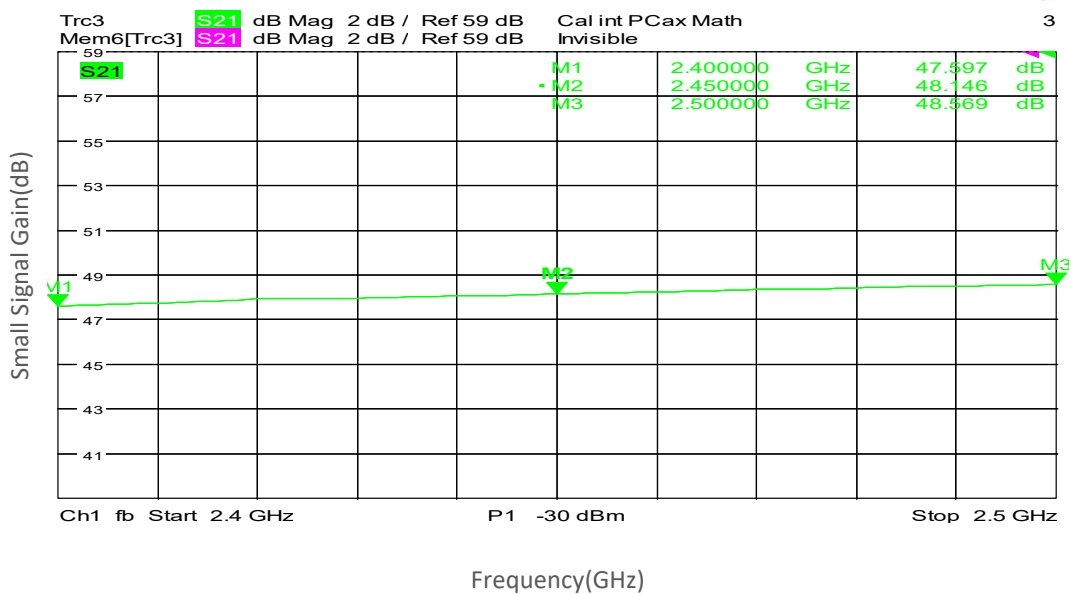


Typical Performance Data:

Input VSWR vs Frequency



Small Signal Gain vs Frequency

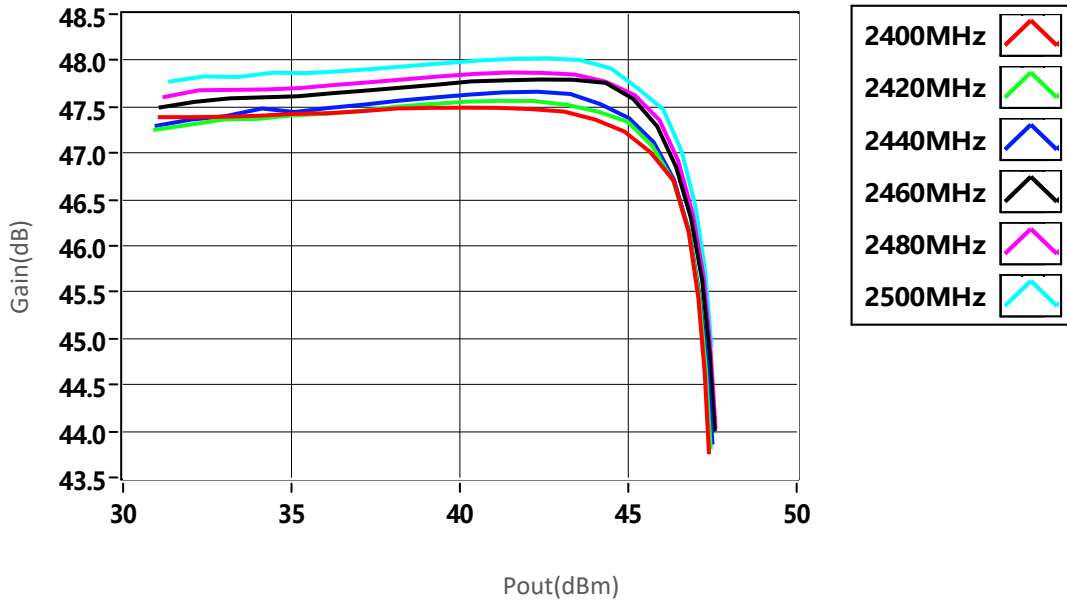


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

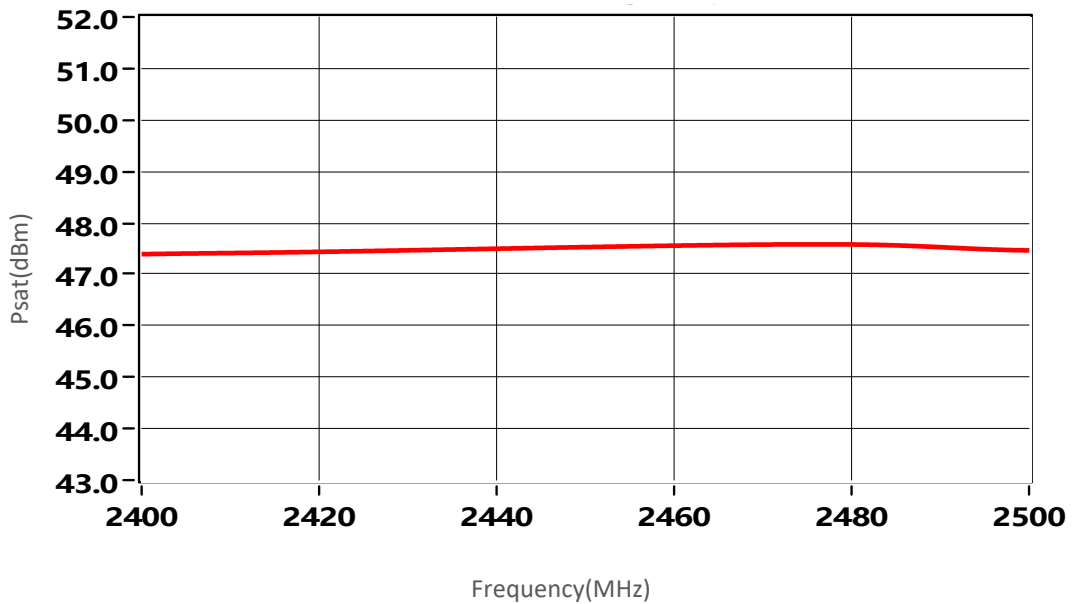


Typical Performance Data:

Gain vs Output Power



Psat vs Frequency

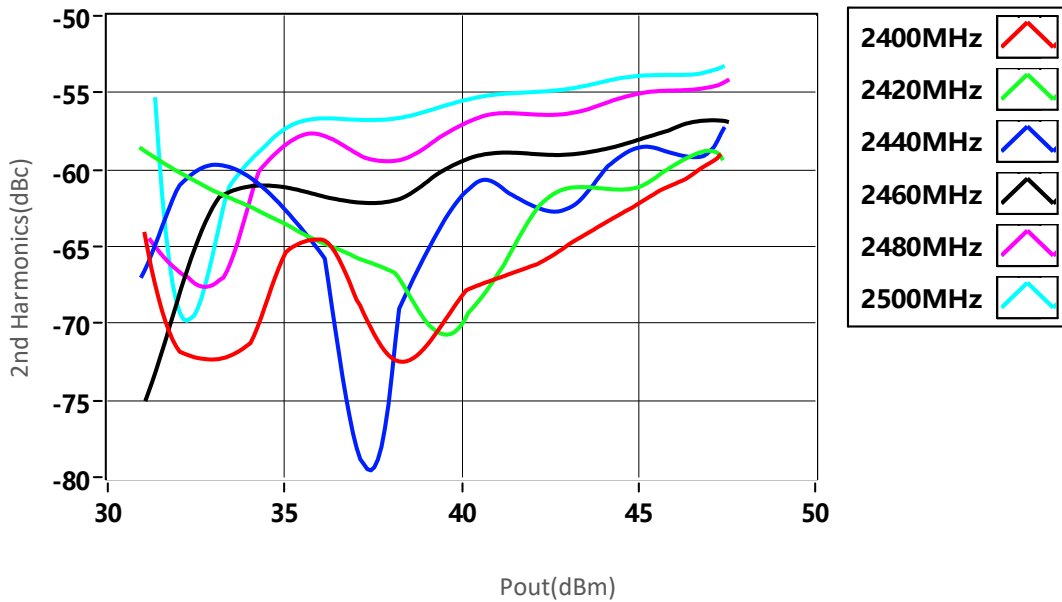


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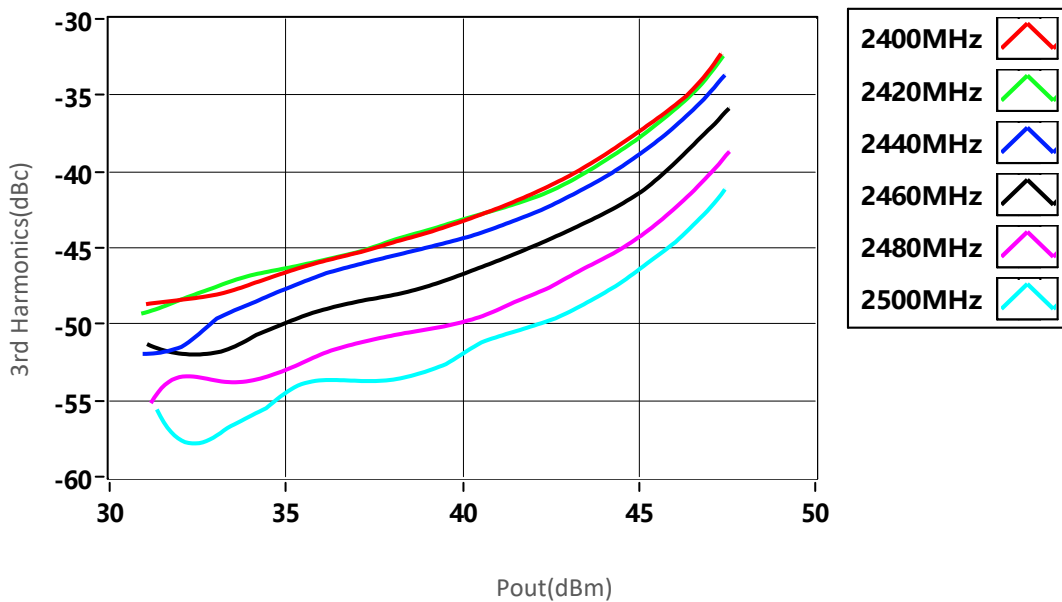


Typical Performance Data:

2nd Harmonics vs Output Power



3rd Harmonics vs Output Power



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