



Power Amplifier

Model: PA-50M-350M-2

50-350MHz 2W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 50-350MHz
- High output power at saturation, 2W Min.
- High gain, 33 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-50M-350M-2 is a power amplifier with a minimum small signal gain of 33 dB and a minimum P_{sat} of 2W across the frequency range of 50 to 350MHz. The DC power requirement for the amplifier is +12 VDC/1000 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	50		350	MHz
Small Signal Gain	33	35		dB
Small Signal Gain Flatness		±1	±2	dB
Output Psat	33	34		dBm
Input VSWR			1.5	:1
DC Voltage		+12		V DC
DC Supply Current		1000		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	50,000	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	76*48*15	mm
Weight	200	g

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

Absolute Maximum Ratings:

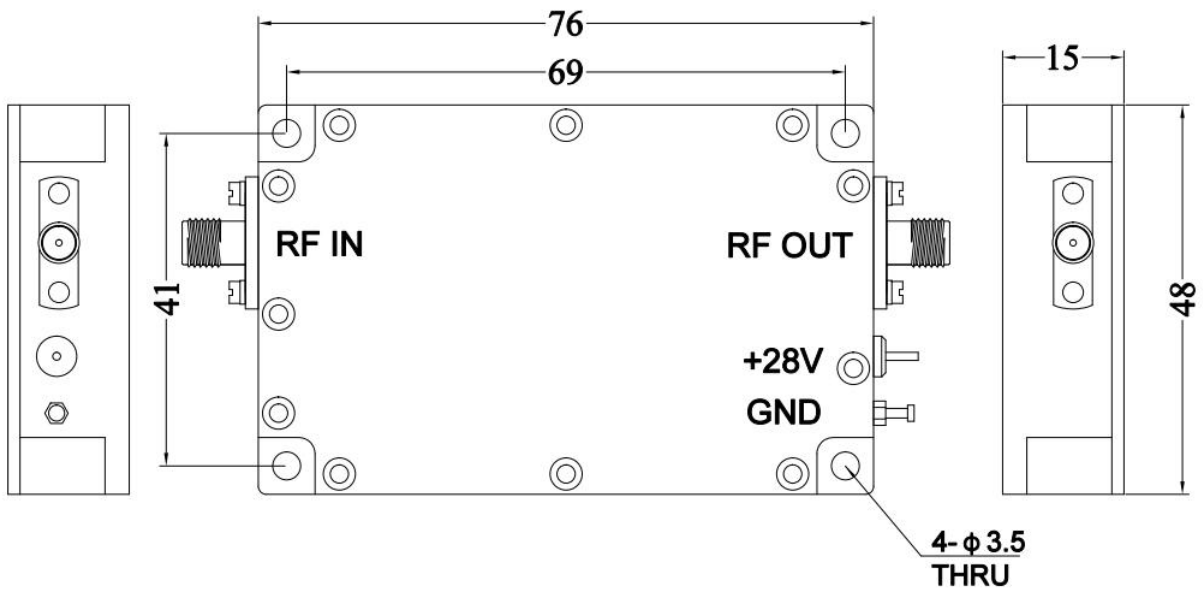
Parameter	Value
RF Input Power	0 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-50M-350M-2



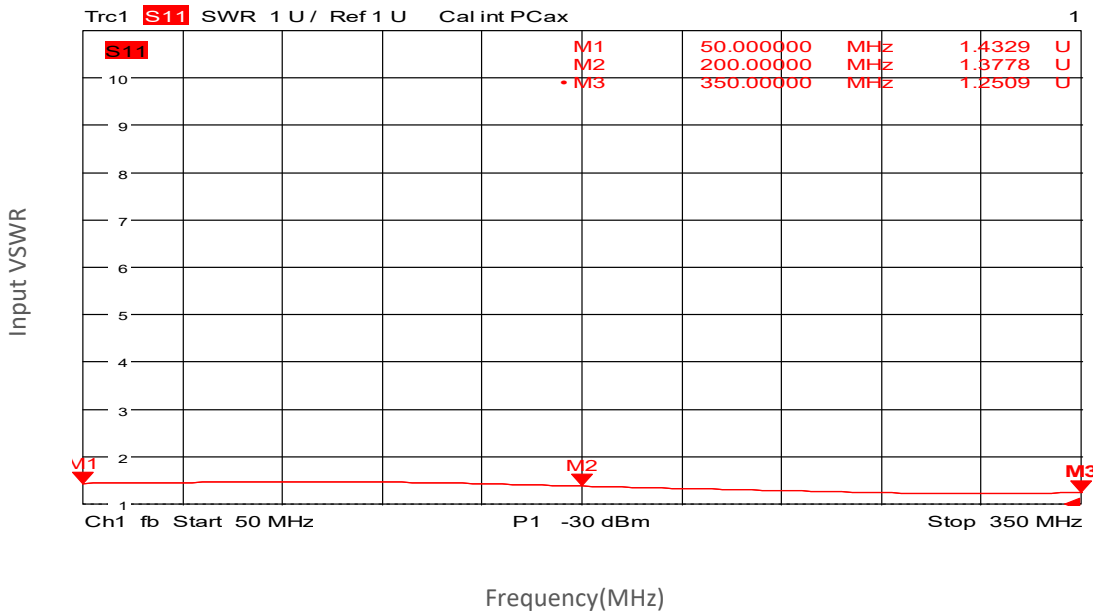
Ordering Information:

Base Number	Description	Optional
PA-50M-350M-2	Power Amplifier, 50-350MHz, Gain:33dB,Psat:2W,+12V DC	Without Heatsink
PA-50M-350M-2-HS	Power Amplifier, 50-350MHz, Gain:33dB,Psat:2W,+12V DC	With Heatsink

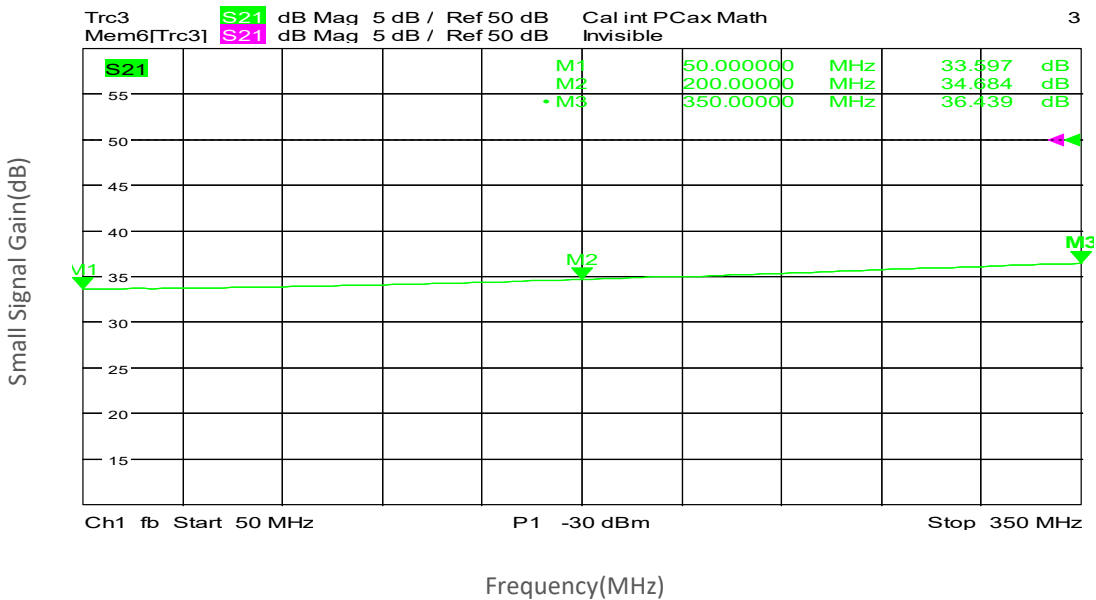


Typical Performance Data:

Input VSWR vs Frequency



Small Signal Gain vs Frequency

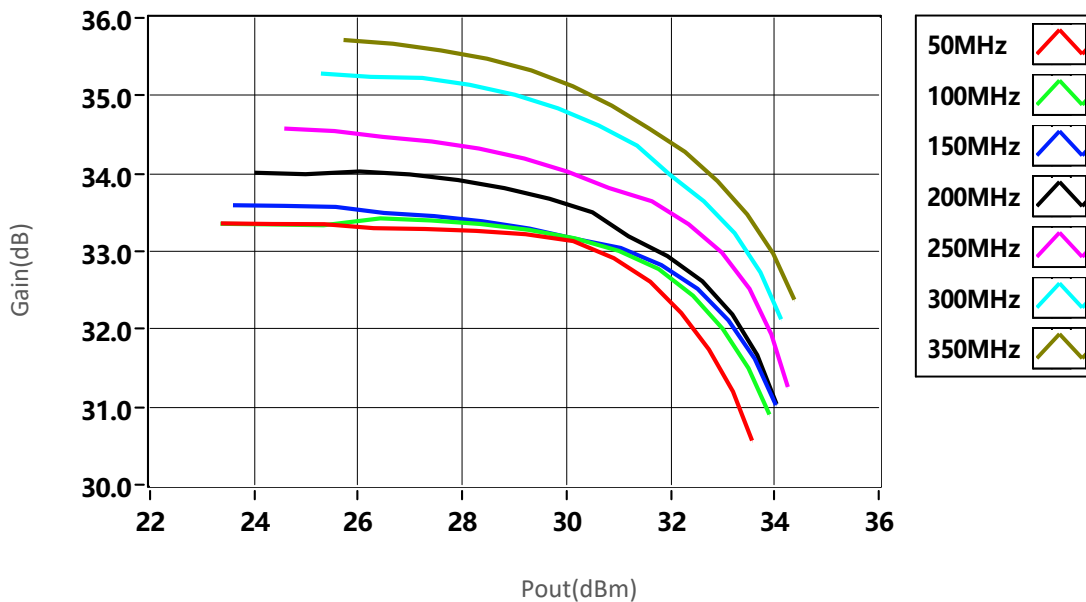


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

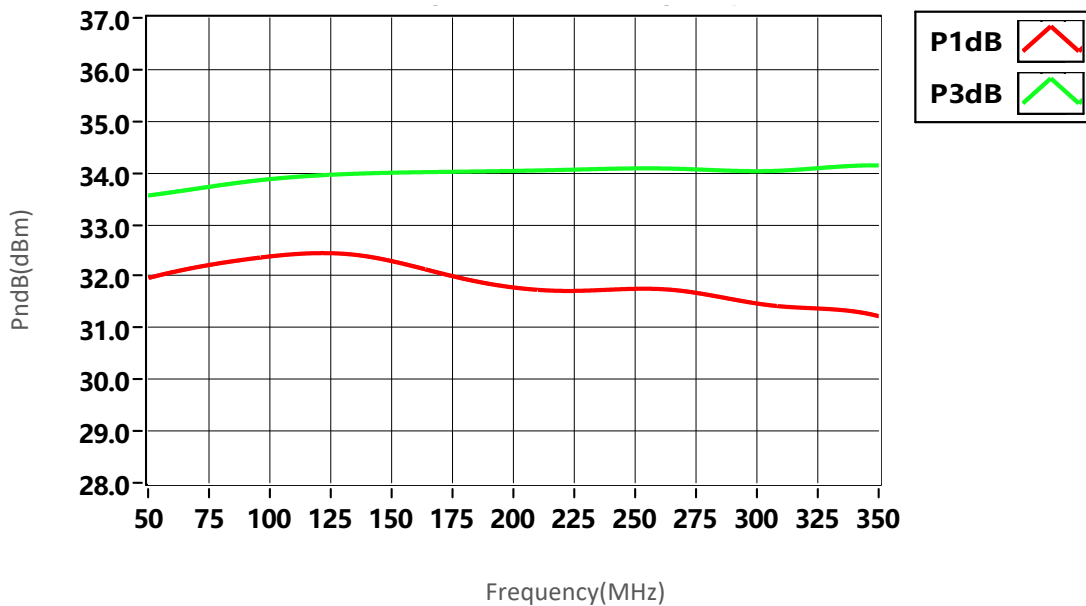


Typical Performance Data:

Gain vs Output Power



PndB vs Frequency

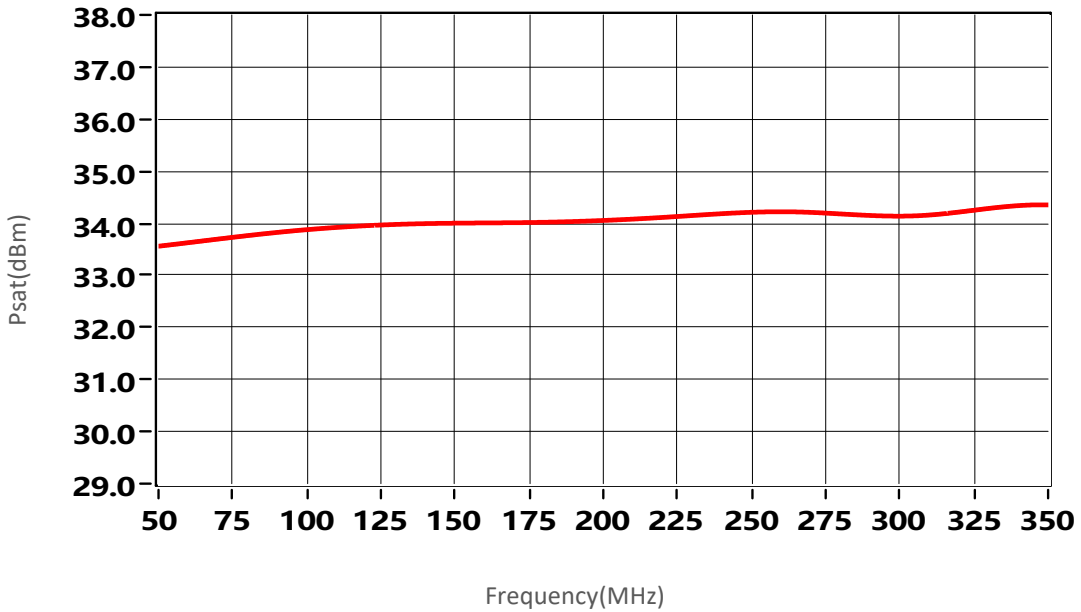


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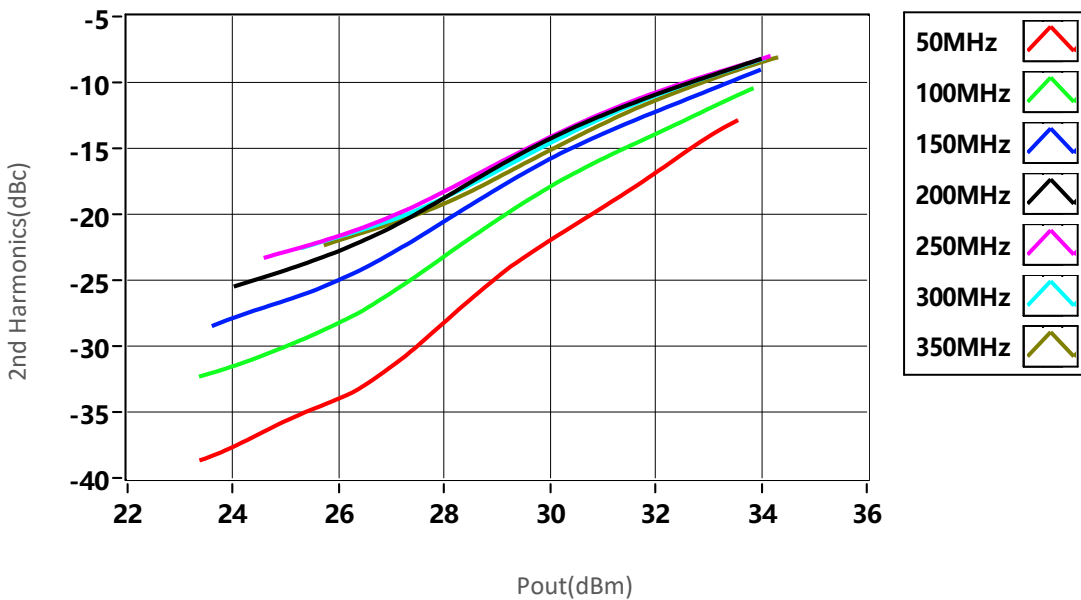


Typical Performance Data:

Psat vs Frequency



2nd Harmonics vs Output Power

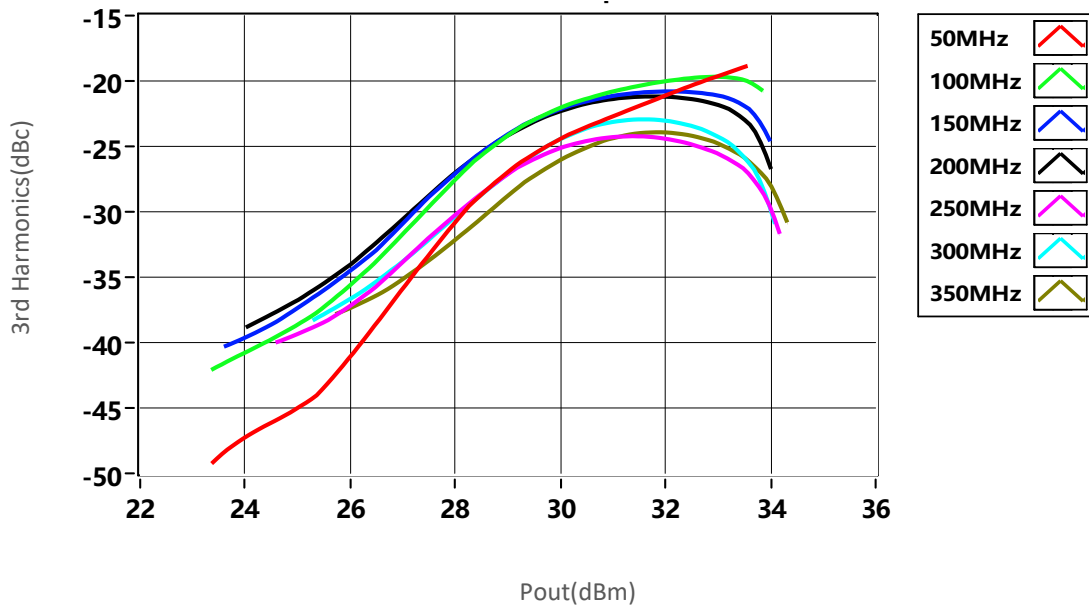


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.



Typical Performance Data:

3rd Harmonics 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.