Power Amplifier

Model: PA-80M-1000M-63

0.08-1GHz 63W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 0.08-1GHz
- High output power at saturation, 63W Min.
- High gain,48 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-80M-1000M-63 is a power amplifier with a minimum small signal gain of 48 dB and a minimum Psat of 63W across the frequency range of 0.08 to 1 GHz. The DC power requirement for the amplifier is +28 VDC/1.5 A. The input and output port configuration offers coax adapter structure with SMA female.

Electrical Specifications at 25℃:

Parameter	Min	Typ	Max	Units
Frequency range	0.08		1	GHz
Small Signal Gain	48	52		dB
Gain Flatness		±2	±3	dB
Output P1dB		46		dBm
Output Psat	48	48.5		dBm
Input VSWR		1.5	2.0	:1
DC Voltage		+28		V DC
DC Supply Current		1.5	1.0	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temerature*	-20℃ to +50℃	
Non-operating Temperature*	-30℃ to +60℃	
Relative humidity	95	%
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	D-SUB-9	
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	170*80*20	mm
Weight	200	g

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

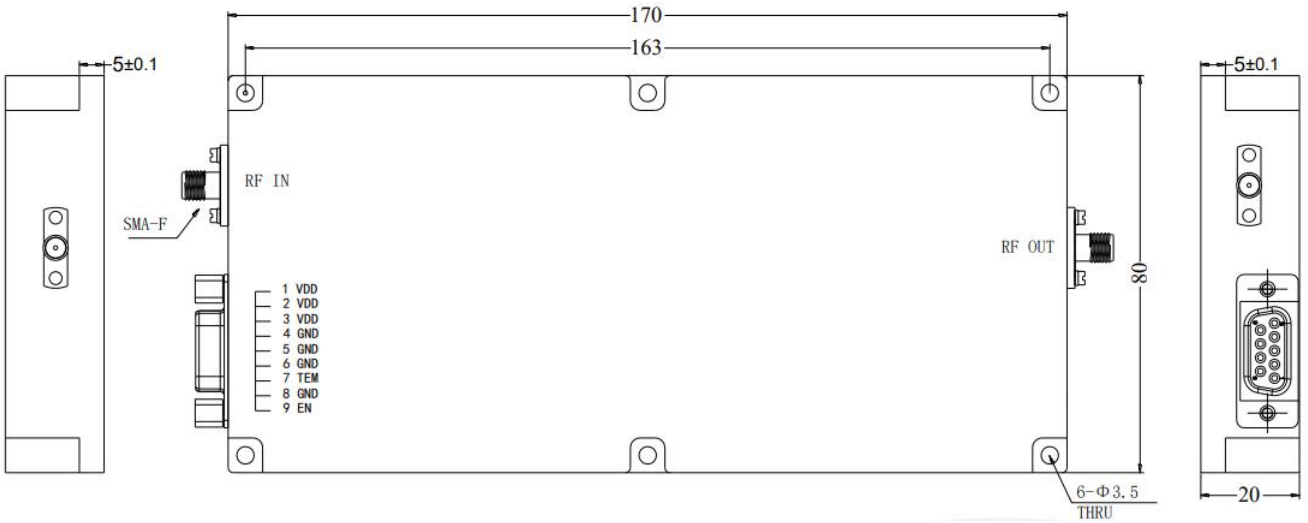
Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm

PA-80M-1000M-63

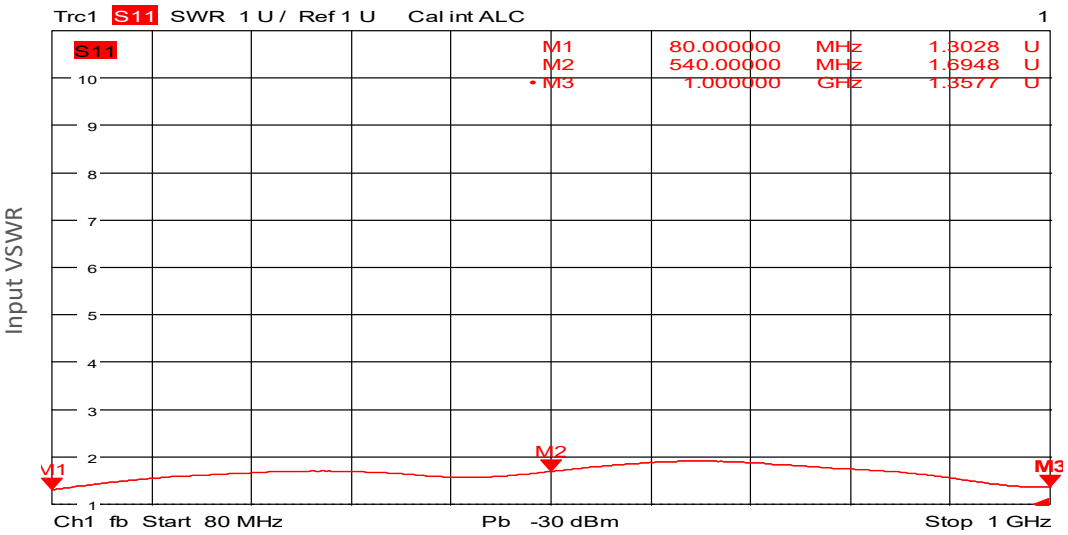


Ordering Information:

Base Number	Description	Optional
PA-80M-1000M-63	Power Amplifier, 0.08-1GHz, Gain:48dB,Psat:63W,+28V DC	Without Heatsink
PA-80M-1000M-63-HS	Power Amplifier, 0.08-1GHz, Gain:48dB,Psat:63W,+28V DC	With Heatsink

Typical Performance Data:

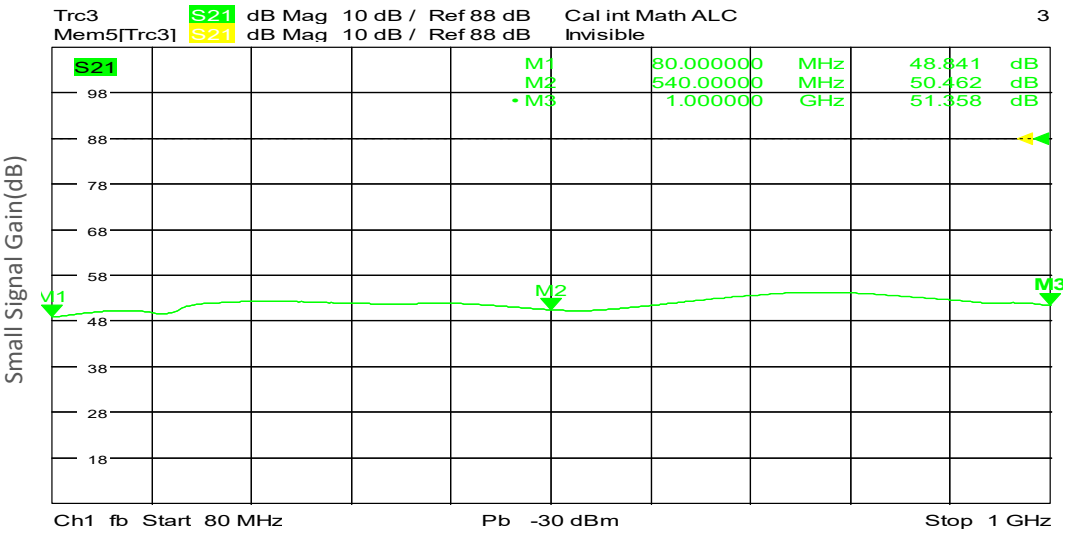
Input VSWR vs Frequency



Input VSWR

Frequency(MHz)

Small Signal Gain vs Frequency



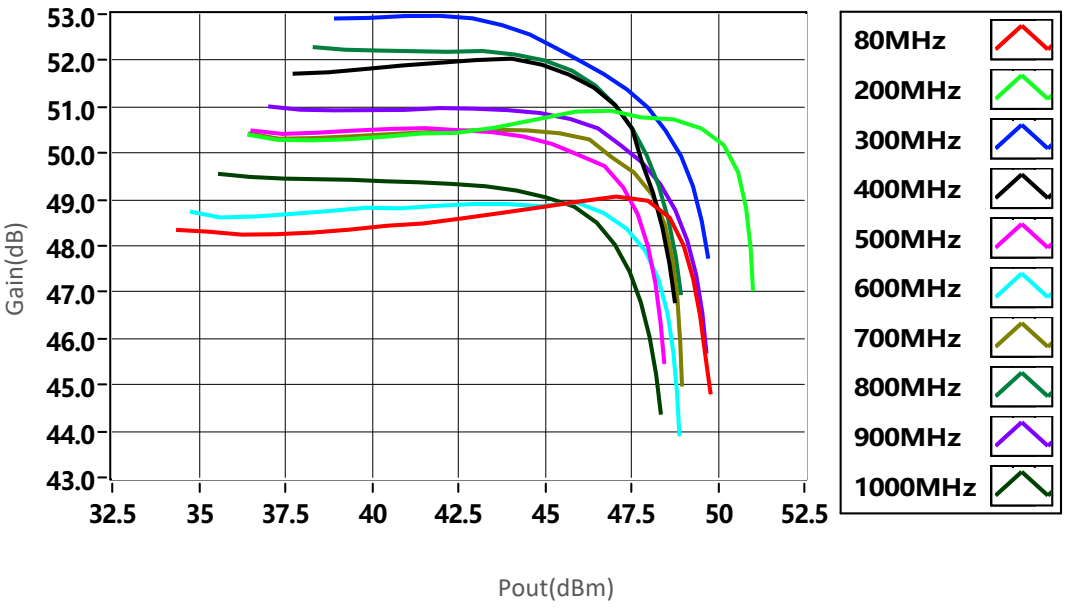
Small Signal Gain(dB)

Frequency(MHz)

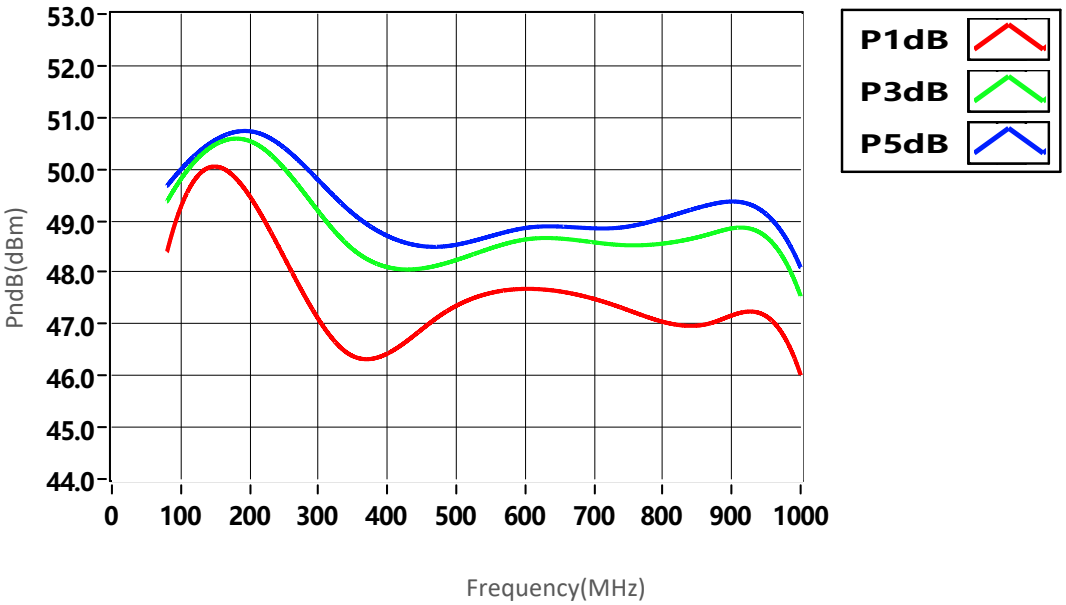
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

Gain vs Output Power



PndB vs Frequency



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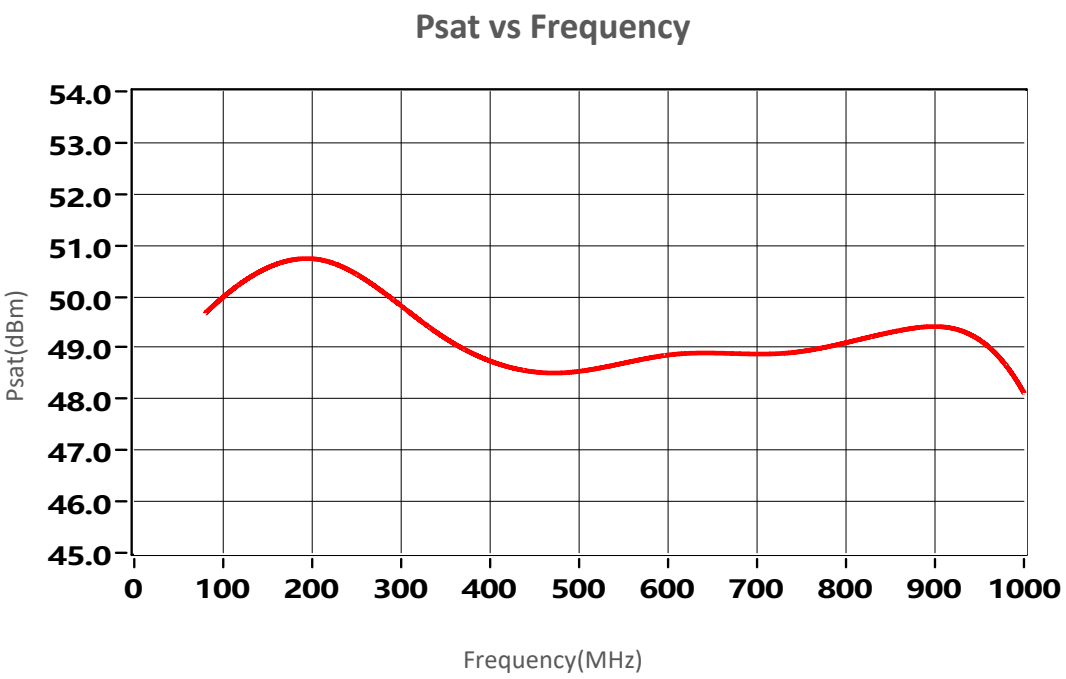

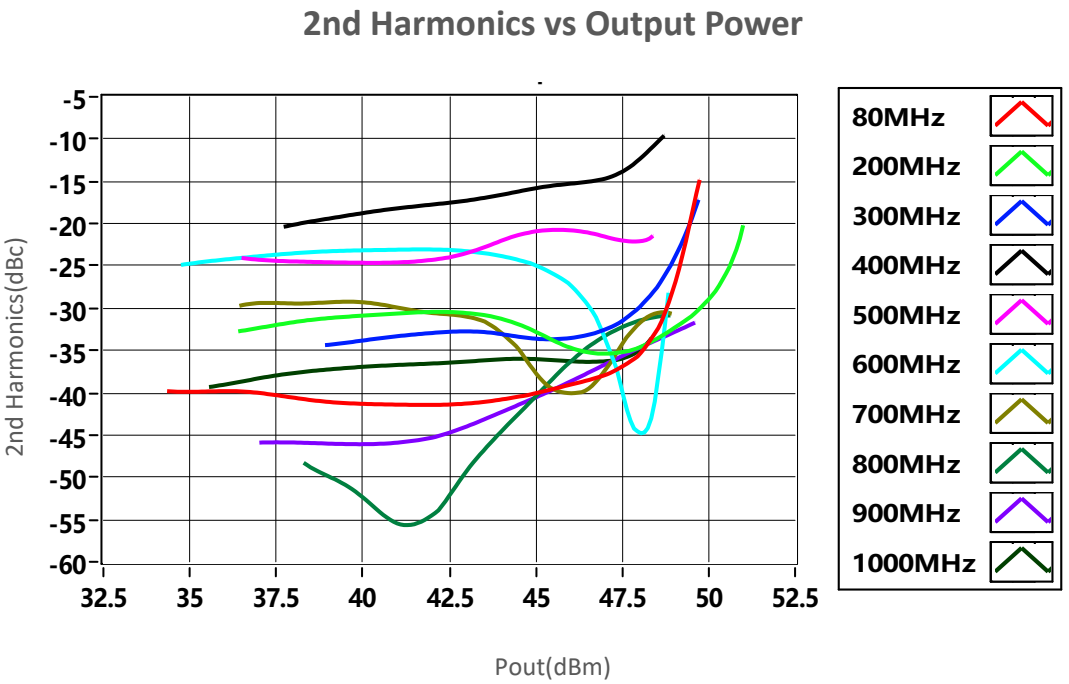

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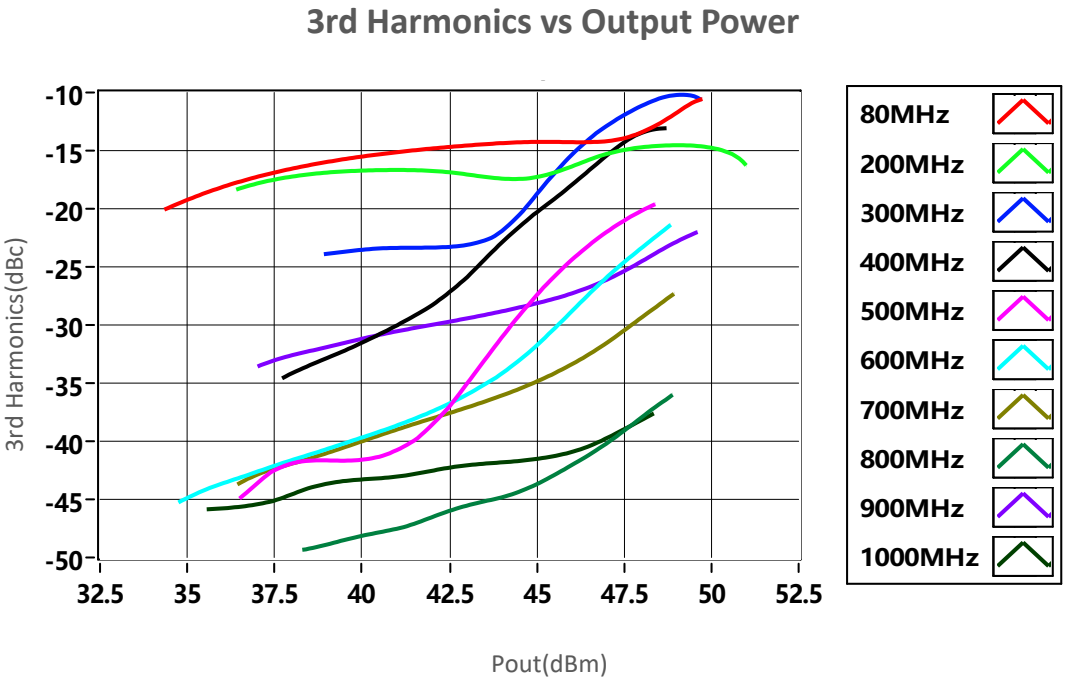

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