



Power Amplifier

Model: PA-890M-925M-250

890-925MHz 250W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 890-925MHz
- High output power at saturation, 250W Min.
- High gain, 54 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-890M-925M-250 is a power amplifier with a typical small signal gain of 54 dB and a minimum P_{sat} of 250W across the frequency range of 890 to 925 MHz. The DC power requirement for the amplifier is +48 VDC/15 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	890		925	MHz
Small Signal Gain	52	54		dB
Gain Flatness		±1	±1.5	dB
Output Psat	54	54.5		dBm
Input VSWR		1.5	2.0	:1
DC Voltage	+46	+48	+50	V DC
DC Supply Current		15		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	D-SUB-9	
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*95*22	mm
Weight	1000	g

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

Absolute Maximum Ratings:

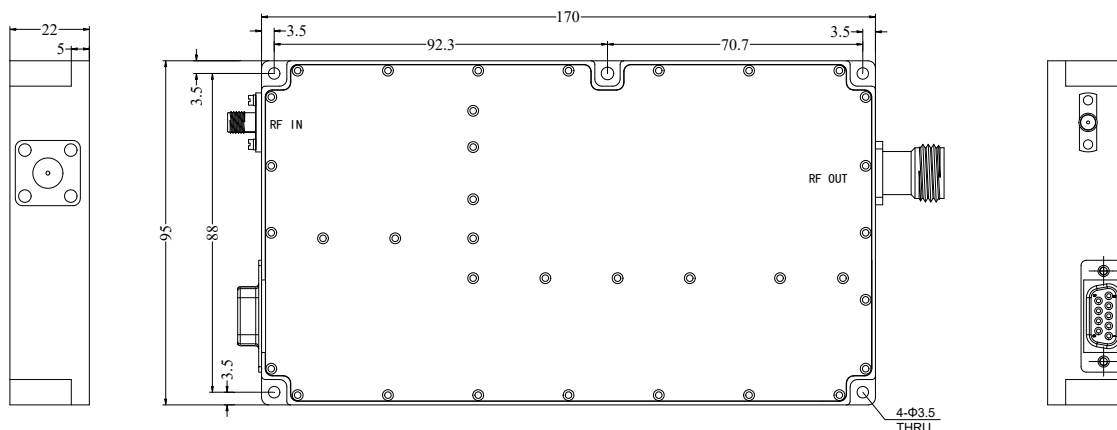
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



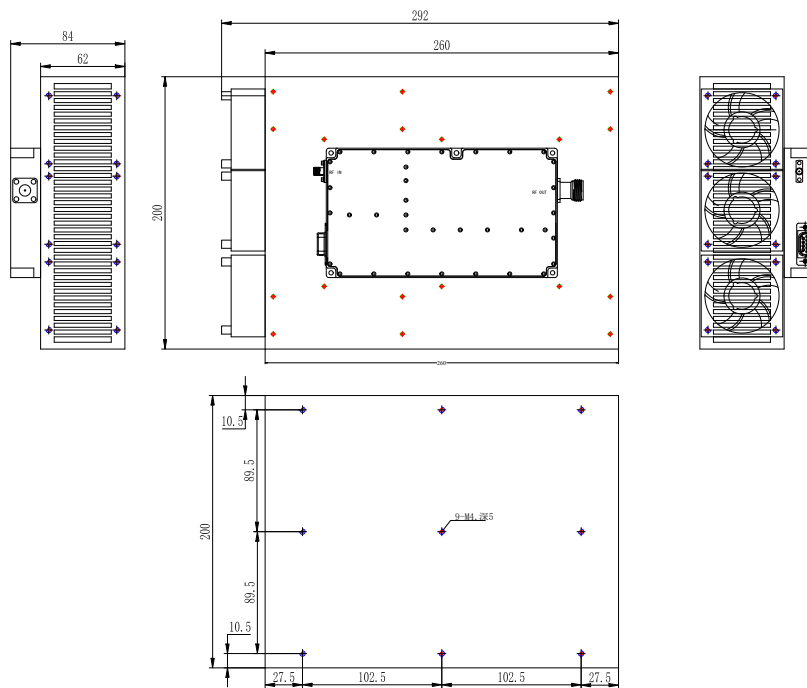
Outline Drawing:

Unit:mm

PA-890M-925M-250



PA-890M-925M-250-HS



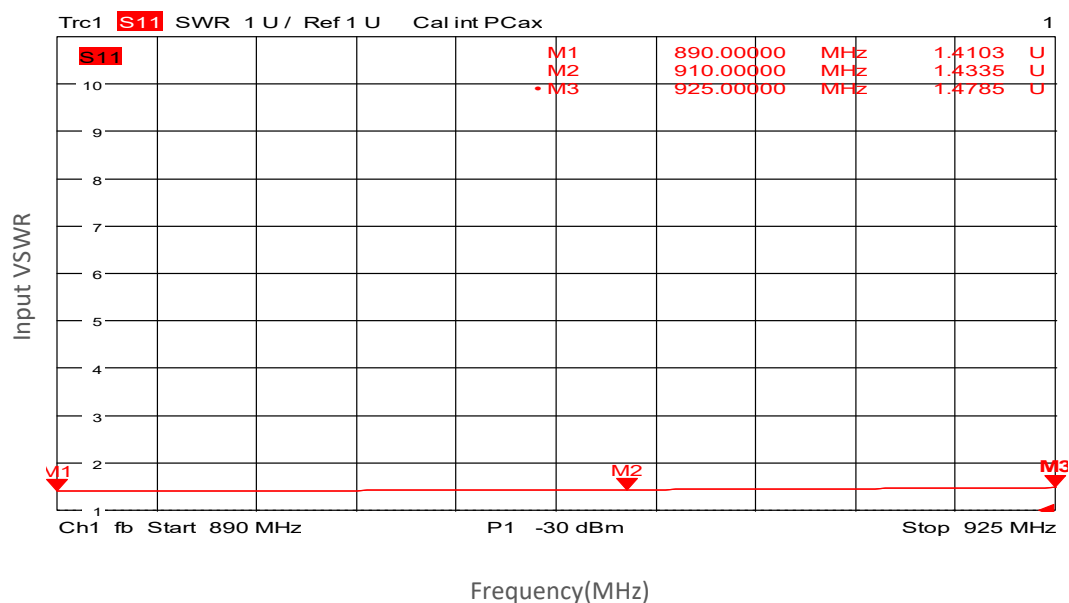
Ordering Information:

Base Number	Description	Optional
PA-890M-925M-250	Power Amplifier, 890-925MHz, Gain:54dB,Psat:250W,+48V DC	Without Heatsink
PA-890M-925M-250-HS	Power Amplifier, 890-925MHz, Gain:54dB,Psat:250W,+48V DC	With Heatsink

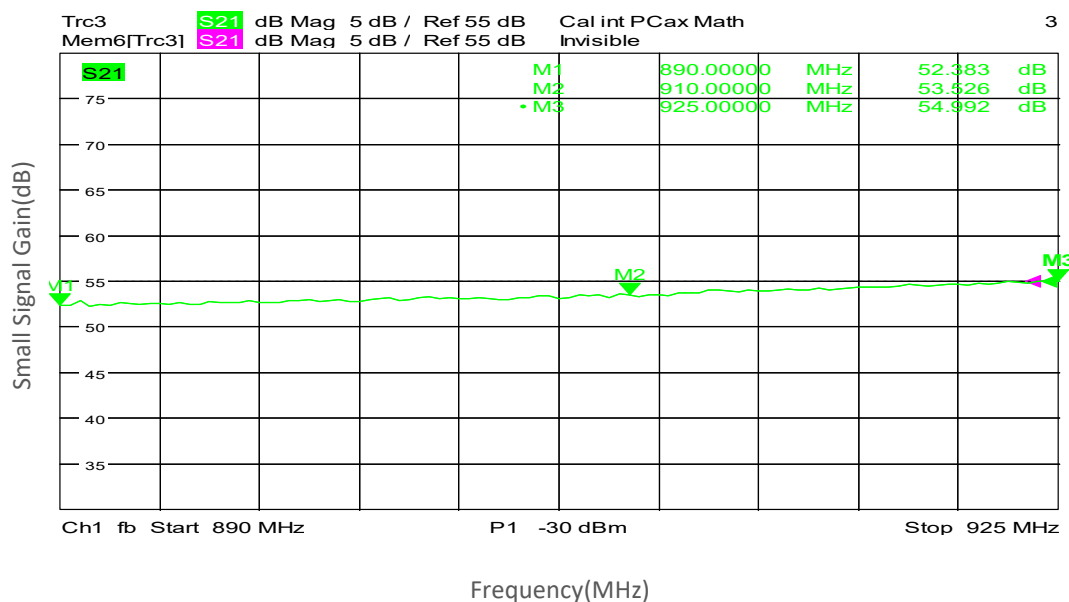


Typical Performance Data:

Input VSWR vs Frequency



Small Signal Gain vs Frequency

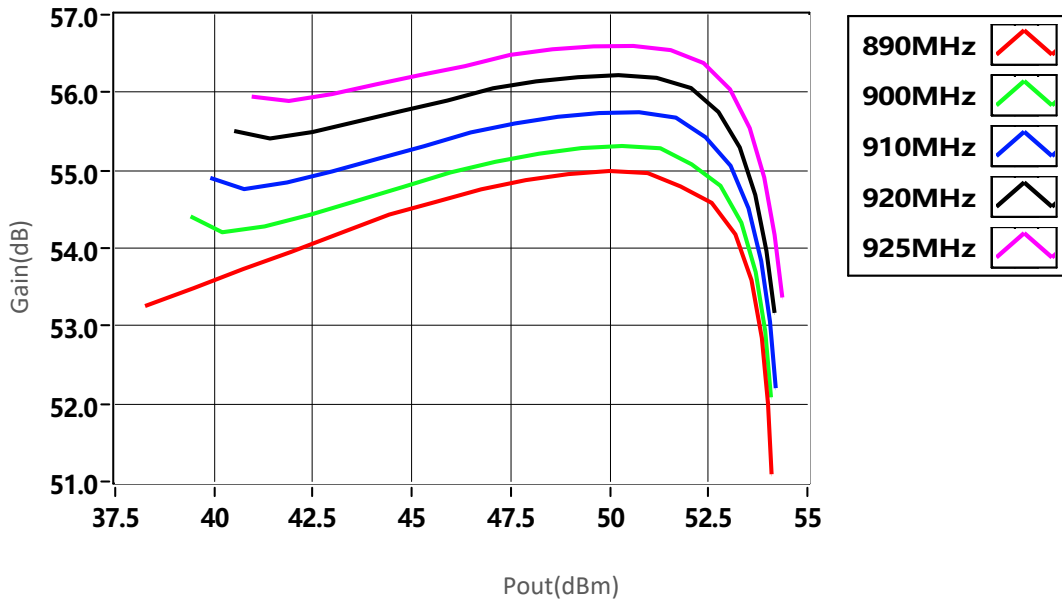


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

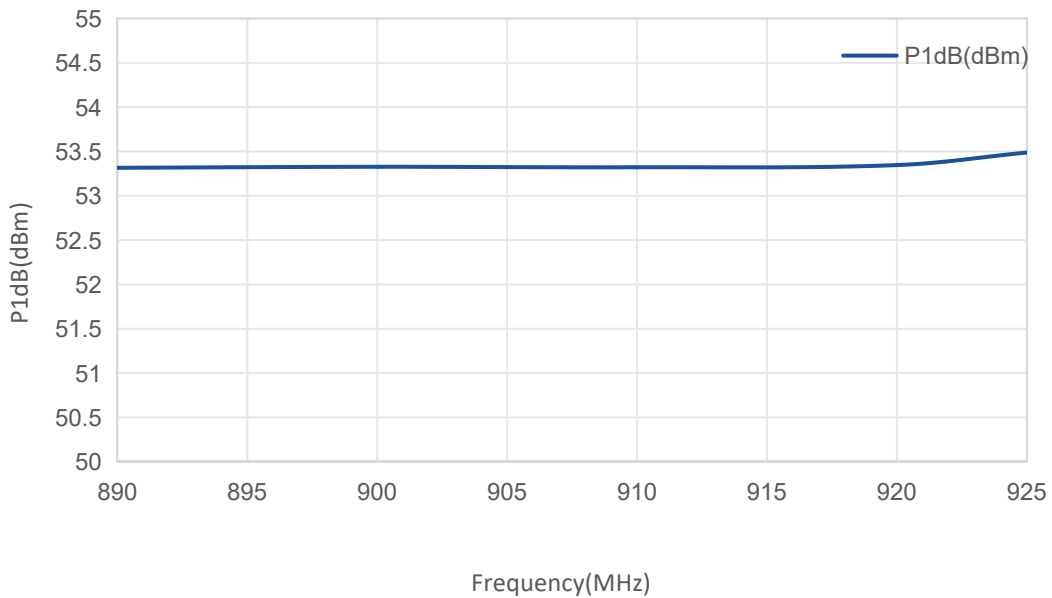


Typical Performance Data:

Gain vs Output Power



P1dB vs Frequency

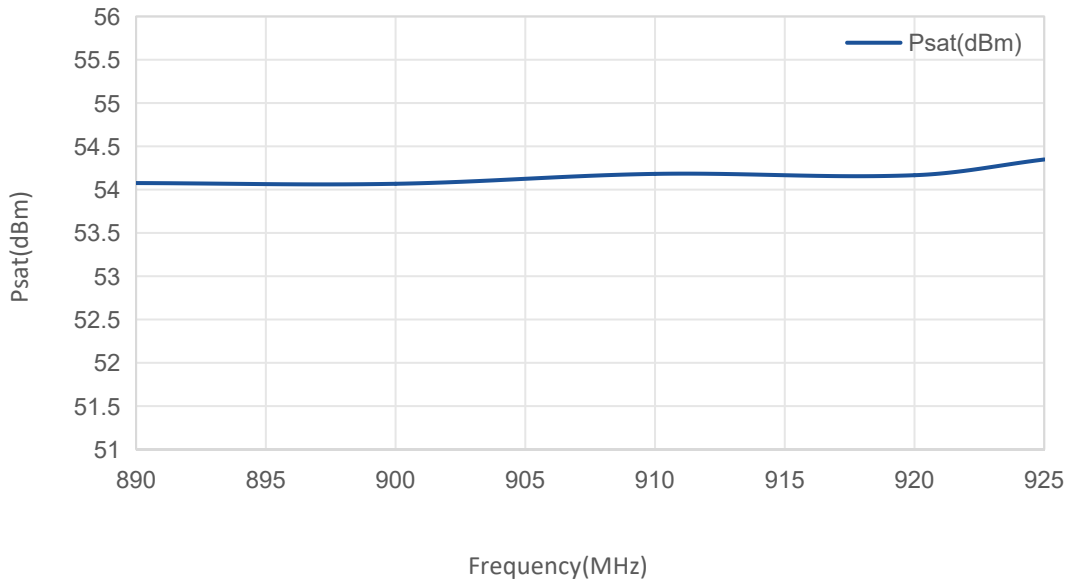


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

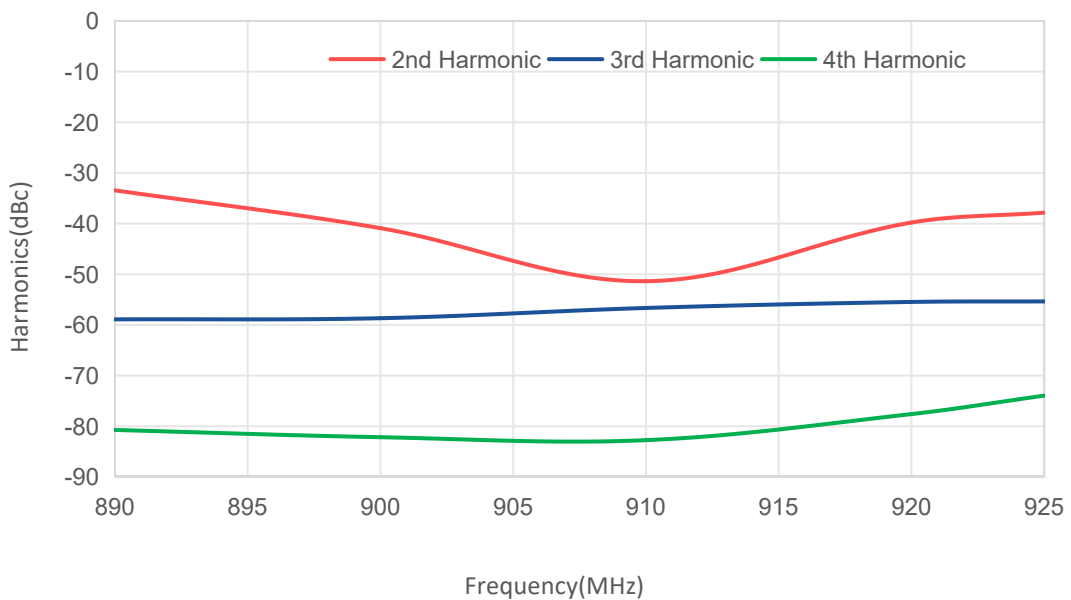


Typical Performance Data:

Psat vs Frequency



Harmonics 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.