Power Amplifier

Model: PA-700M-2G2-1.6

0.7-2.2GHz 1.6W CW

Ultrabroad frequency range, high performanceand exceptional RF characteristics

Features:

- Frequency range: 0.7-2.2GHz
- Input 1 dB Gain Compression Point, 1.6W Min.
- High gain, 62dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview：

The PA-700M-2G2-1.6 is a power amplifier with a minimum small signal gain of 62 dB and a minimum P1dB of 1.6W across the frequency range of 0.7 to 2.2GHz. The DC power requirement for the amplifier is +28 VDC/2000 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	0.7		2.2	GHz
Small Signal Gain	62			dB
Small Signal Gain Flatness			±2	dB
Output P1dB	32			dBm
Noise Figure		2.5	3	dB
Harmonic			-25	dBc
Input VSWR		1.5	2	:1
DC Voltage		+28		V DC
DC Supply Current		2000		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	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	140*80*22	mm
Weight	200	g

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

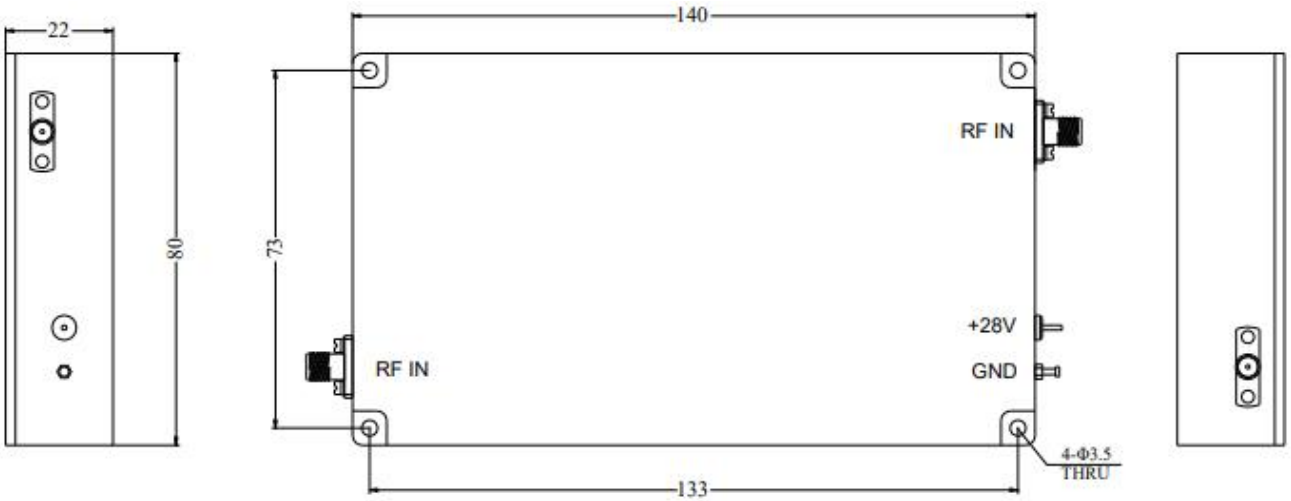
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+32 V
RF Input Power	-20 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-700M-2G2-1.6

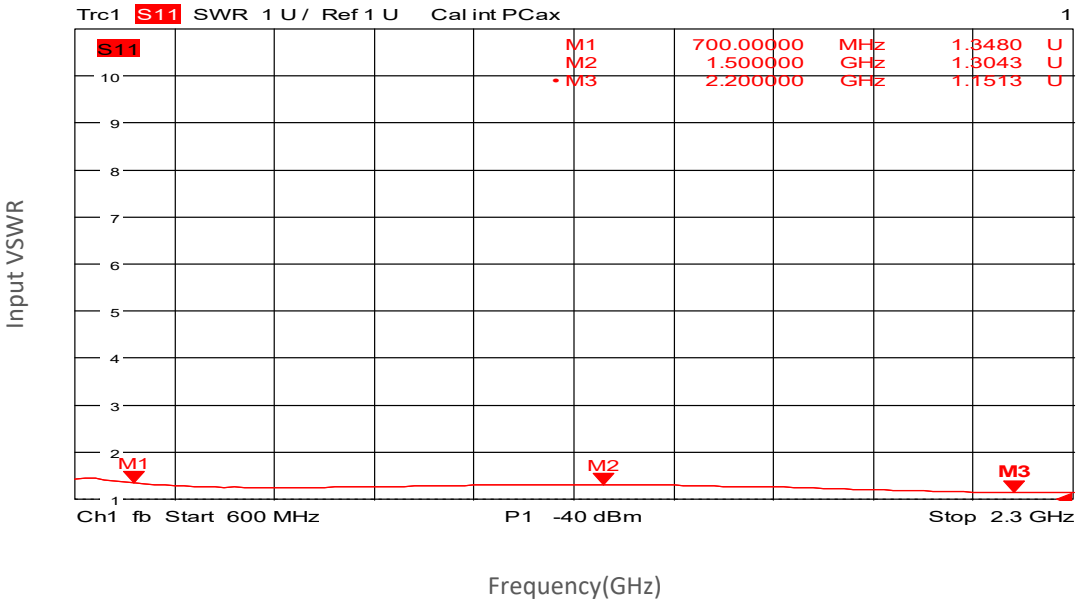


Ordering Information:

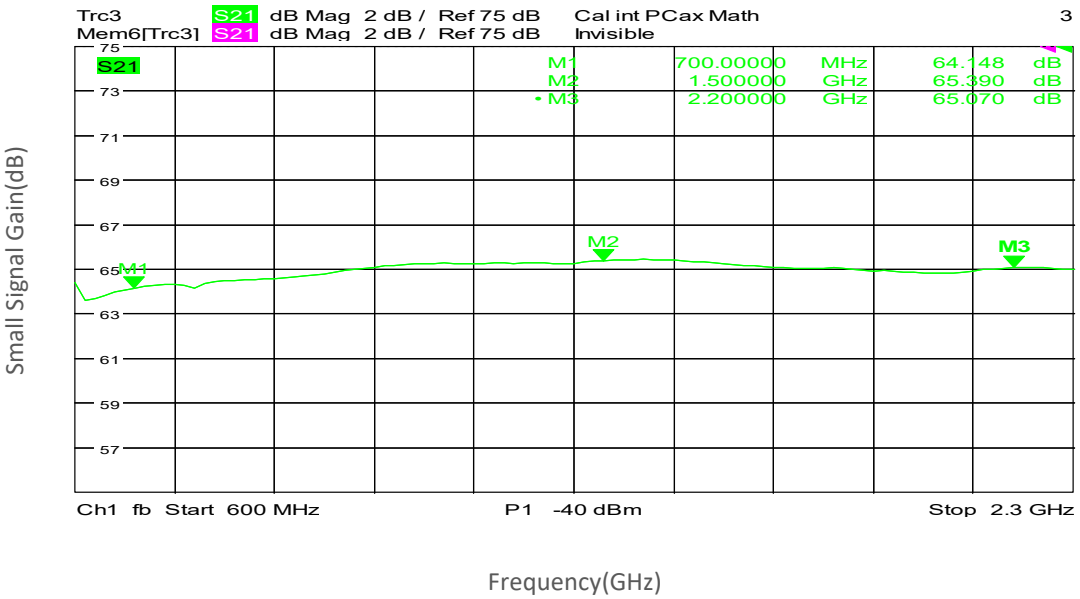
Base Number	Description	Optional
PA-700M-2G2-1.6	Power Amplifier, 0.7-2.2GHz, Gain:62dB,Psat:1.6W,+28V DC	Without Heatsink
PA-700M-2G2-1.6-HS	Power Amplifier, 0.7-2.2GHz, Gain:62dB,Psat:1.6W,+28V DC	With Heatsink

Typical Performance Data:

Input VSWR vs Frequency

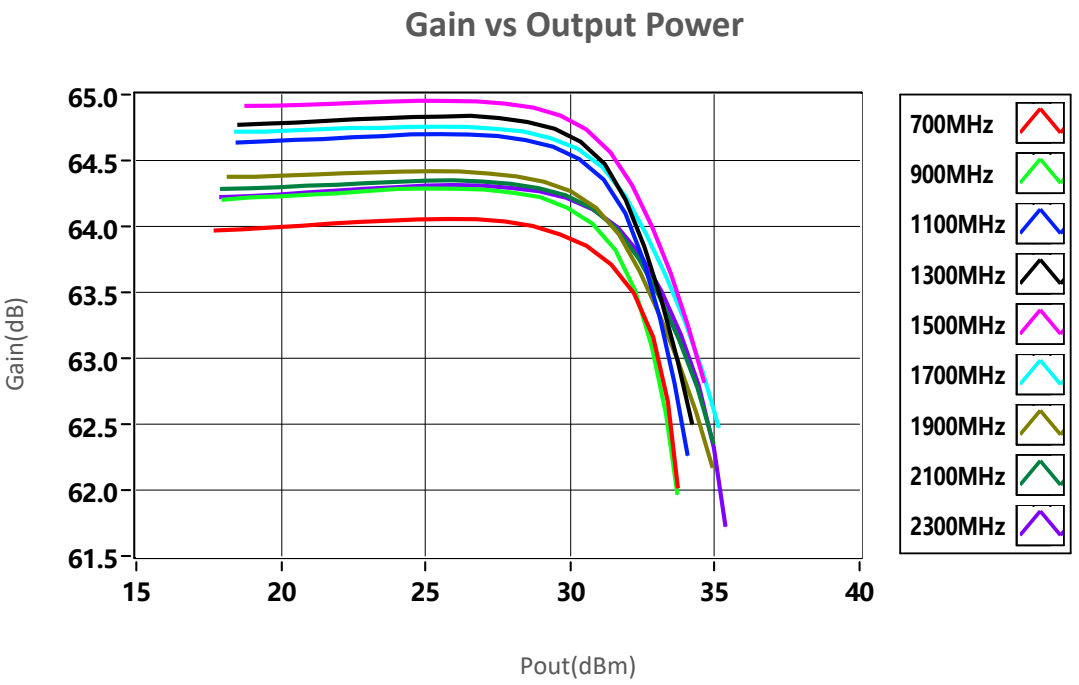


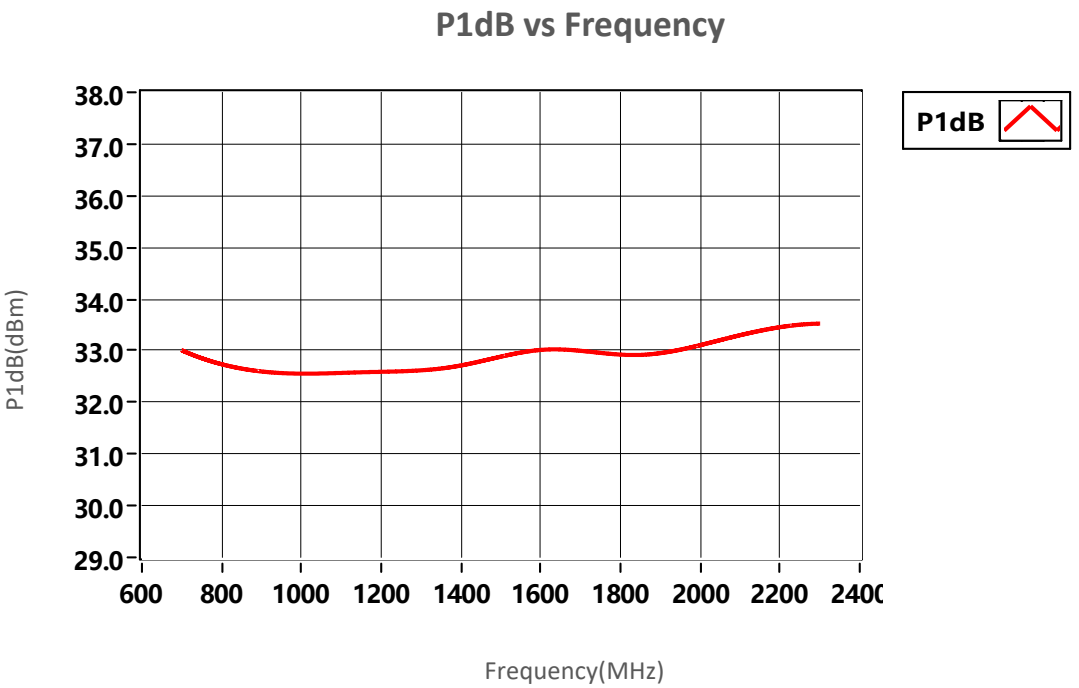
Small Signal Gain vs Frequency



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.

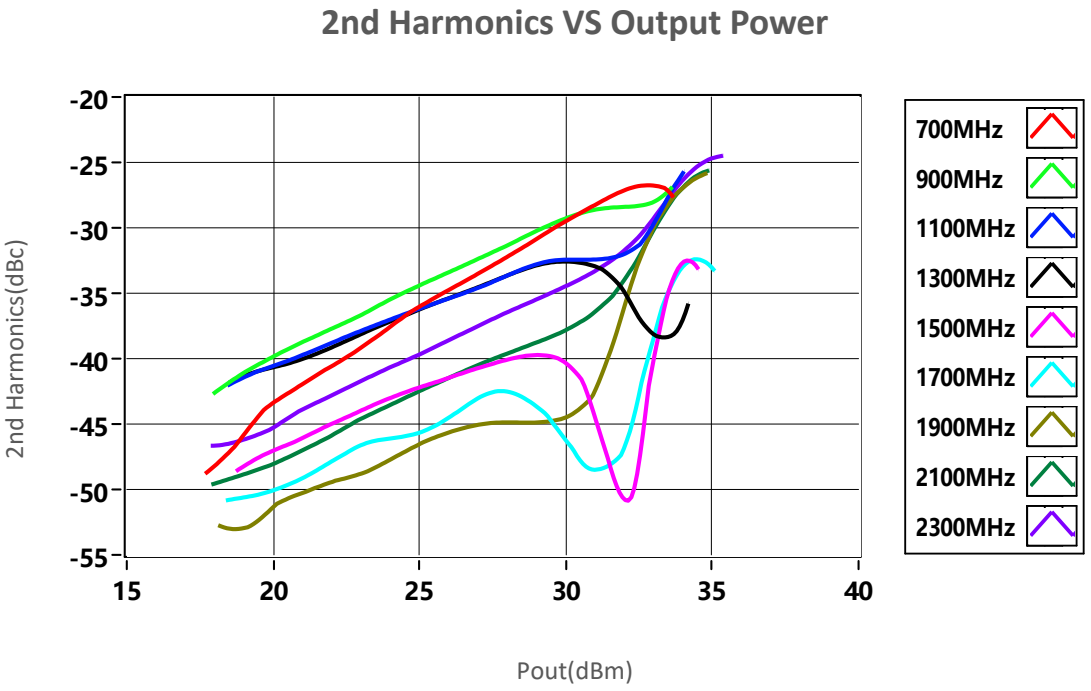
Typical Performance Data:

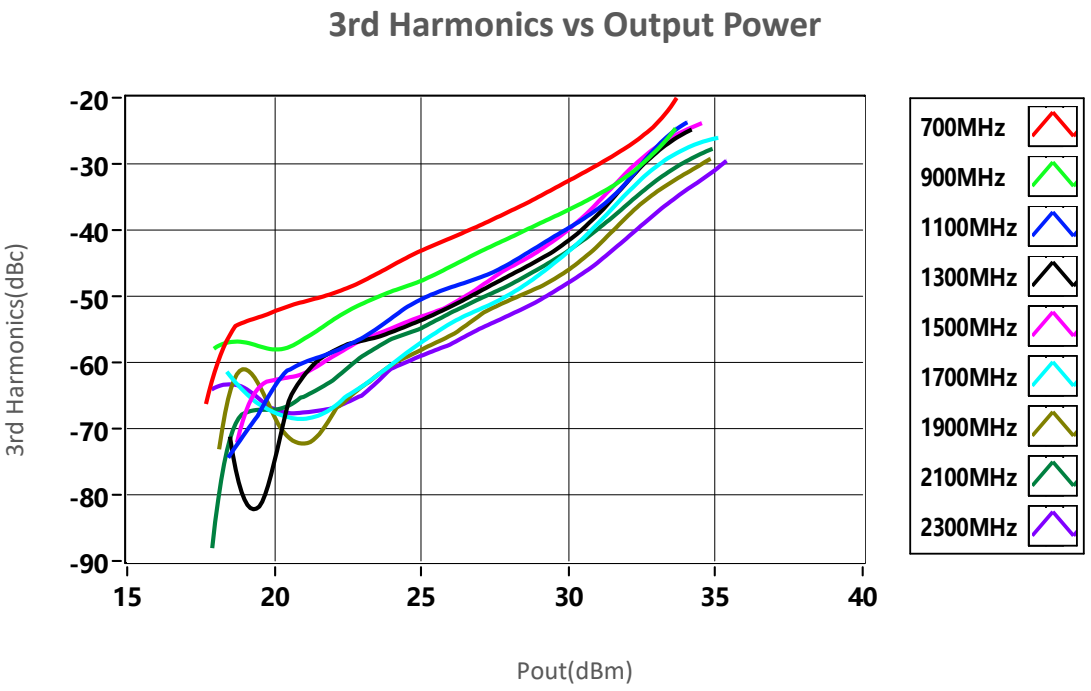




Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:





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.