



Power Amplifier

Model: PA-10M-1G-0.1

10MHz-1GHz 1W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 10MHz-1GHz
- High output power at saturation, 0.1W Min.
- High gain, 30 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-10M-1G-0.1 is a power amplifier with a nominal small signal gain of 30 dB and a minimum Psat of 0.1 W across the frequency range of 10MHz to 1 GHz. The DC power requirement for the amplifier is +15 VDC/0.25 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	10MHz		1GHz	
Small Signal Gain	28	30		dB
Small Signal Gain Flatness		±0.8	±1	dB
Noise Figure		4		dB
Output P1dB	20	21		dBm
Output Psat	21	22		dBm
Input VSWR		1.5	2.0	:1
Output VSWR		1.5	2.5	:1
DC Voltage	12	15	16	V DC
Quiescent Current		0.2		A
Saturation Current		0.25	0.3	A
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	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	76*48*15	mm
Weight	200	g

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

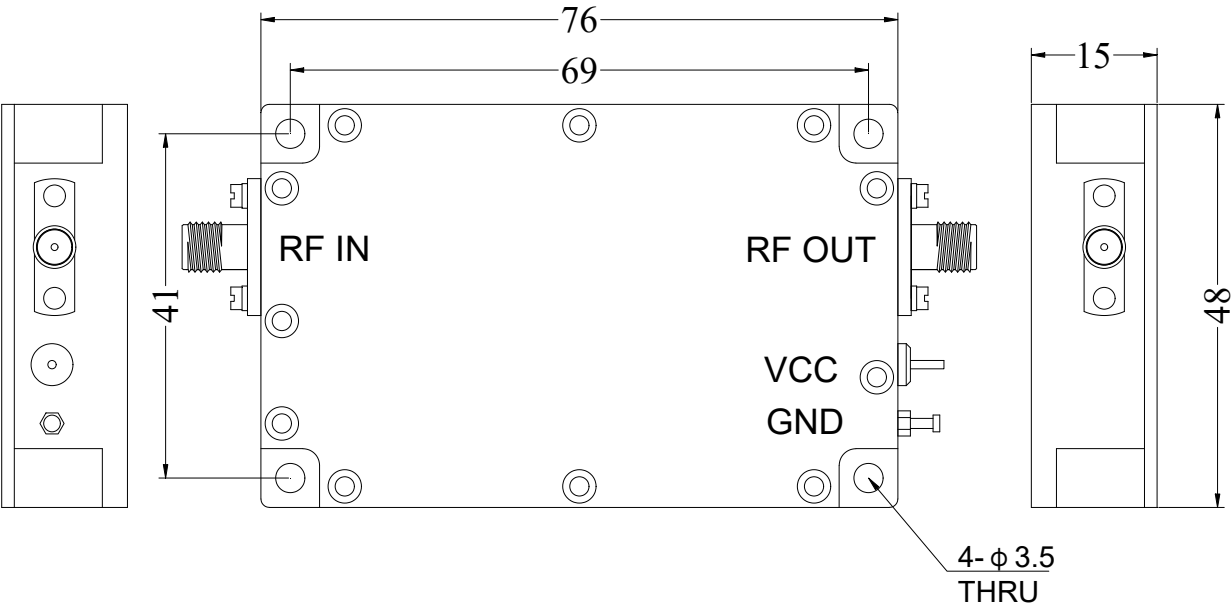


Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+16 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing: Unit:mm

PA-10M-1G-0.1



Ordering Information:

Base Number	Description	Optional
PA-10M-1G-0.1	Power Amplifier, 10MHz-1GHz, Gain:30dB,Psat:0.1W,+15V DC	Without Heatsink
PA-10M-1G-0.1-HS	Power Amplifier, 10MHz-1GHz, Gain:30dB,Psat:0.1W,+15V DC	With Heatsink