



Power Amplifier

Model: PA-6G-12G-6

6-12GHz 6W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 6-12GHz
- High output power at saturation, 6W Typ.
- High gain, 30 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-6G-12G-6 is a power amplifier with a minimum gain of 30 dB and a nominal Psat of 6W across the frequency range of 6 to 12 GHz. The DC power requirement for the amplifier is +12 VDC/2.3 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	6		12	GHz
Gain	30			dB
Gain Flatness		±1.5	±2.5	dB
Output P1dB	36	37		dBm
Output Psat		38		dBm
Spurious		-60		dBc
Input VSWR		1.5	2.0	:1
Output VSWR		1.5	2.0	:1
DC Voltage		+12		V DC
DC Supply Current		2.3	2.5	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +50°C	
Non-operating Temperature*	-50°C to +60°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	50*55*12	mm
Weight	300	g

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

Absolute Maximum Ratings:

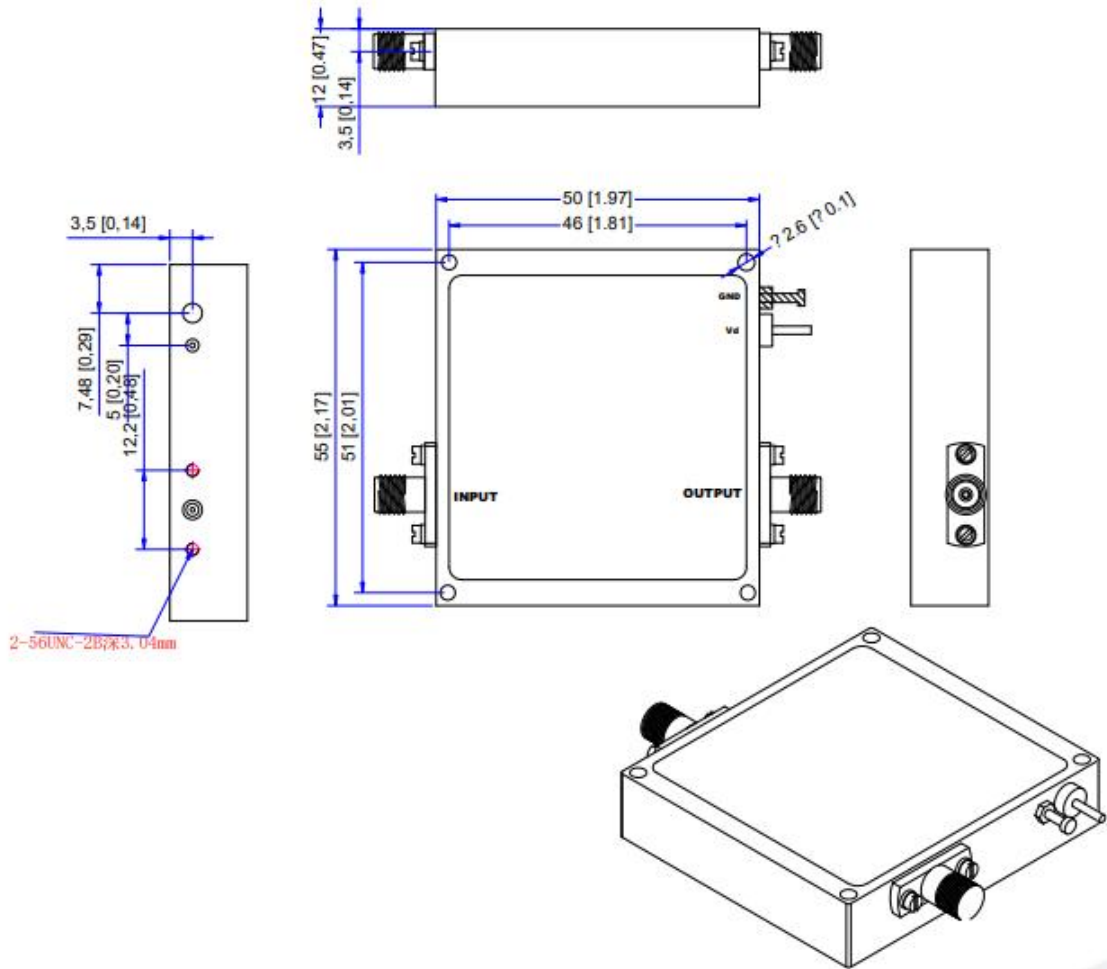
Parameter	Value
Supply Bias Voltage	+12 V
RF Input Power	+12 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-6G-12G-6



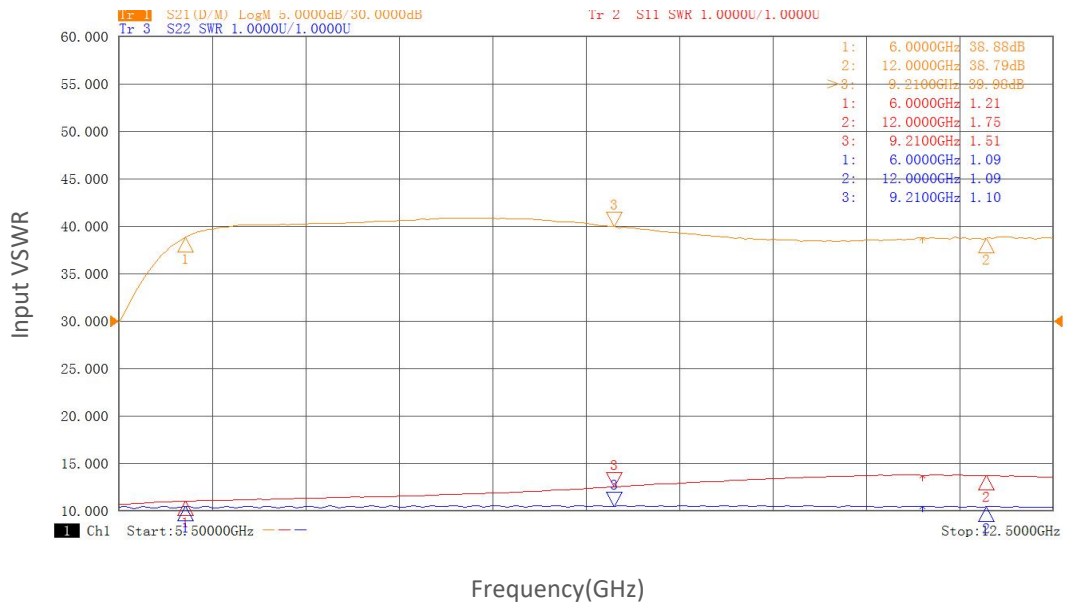
Ordering Information:

Base Number	Description	Optional
PA-6G-12G-6	Power Amplifier, 6-12GHz, Gain:30dB,Psat:6W,+12V DC	Without Heatsink
PA-6G-12G-6-HS	Power Amplifier, 6-12GHz, Gain:30dB,Psat:6W,+12V DC	With Heatsink



Typical Performance Data:

Input VSWR 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.