



Power Amplifier

Model: PA-50K-22G-0.2

50KHz-22GHz 0.2W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 50KHz-22Hz
- High output power at saturation, 0.2W Typ.
- High gain, 30 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-50K-22G-0.2 is a power amplifier with a minimum small signal gain of 30 dB and a nominal P_{sat} of 0.2 W across the frequency range of 50KHz to 22GHz. The DC power requirement for the amplifier is +12 VDC/260 mA. 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	50KHz		22GHz	
Small Signal Gain	30	32		dB
Output P1dB		22		dBm
Output Psat		23		dBm
Noise Figure		4		dB
Input VSWR		1.8		:1
Output VSWR		1.8		:1
DC Voltage	8	12	13	V DC
DC Supply Current		260		mA
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	35*40*12	mm

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

Absolute Maximum Ratings:

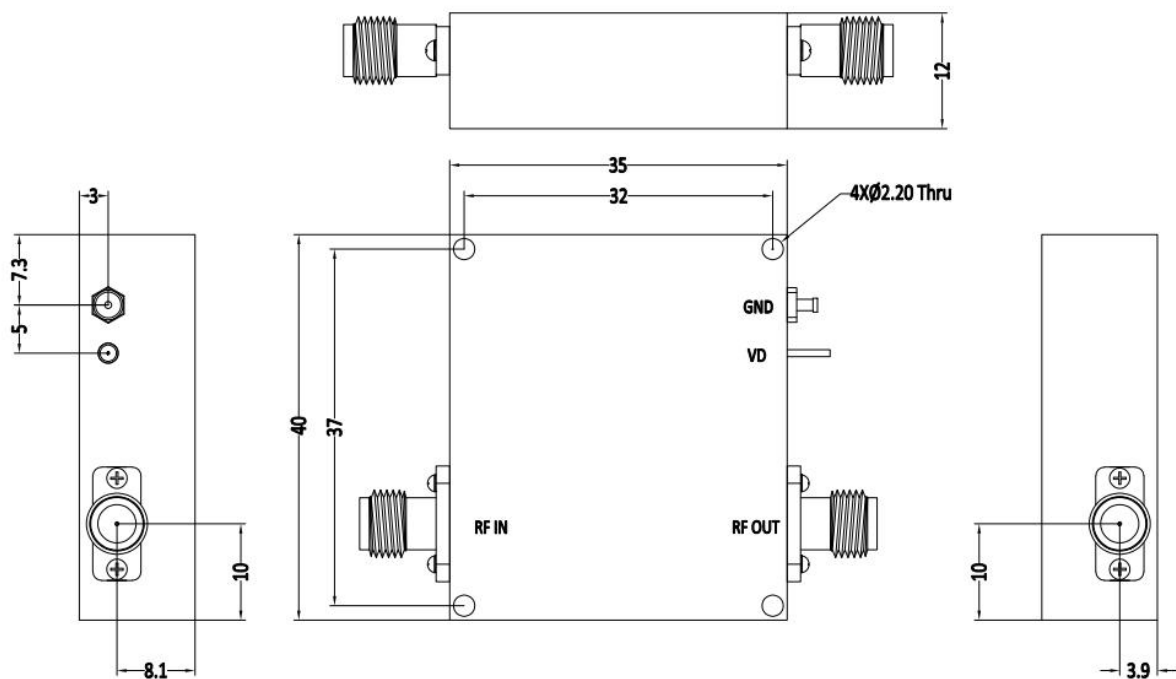
Parameter	Value
Supply Bias Voltage	+13 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-50K-22G-0.2



Ordering Information:

Base Number	Description	Optional
PA-50K-22G-0.2	Power Amplifier,50KHz-22GHz, Gain:30dB,Psat:0.2W,+12V DC	Without Heatsink
PA-50K-22G-0.2-HS	Power Amplifier,50KHz-22GHz, Gain:30dB,Psat:0.2W,+12V DC	With Heatsink