



Power Amplifier

Model: PA-40G-50G-6

40-50GHz 6W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 40-50GHz
- High output power at saturation, 6W Typ.
- High gain, 38 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-40G-50G-6 is a power amplifier with a minimum power gain of 38 dB and a nominal P_{sat} of 6W across the frequency range of 40 to 50 GHz. The DC power requirement for the amplifier is +20 VDC/3.5 A. The input and output port configuration offers coax adapter structure with 2.4mm female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	40		50	GHz
Power Gain	38			dB
Output Psat		38		dBm
Spurious@Pout=38dBm			-50	dBc
DC Voltage		+20	+21	V DC
DC Supply Current		3.5		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	2.4mm Female/2.4mm Female	
DC Bias	Feedthru capacitors	
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	60*60*11(Without heatsink) 188*125*146(With heatsink)	mm
Weight	≤300	Kg

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

Absolute Maximum Ratings:

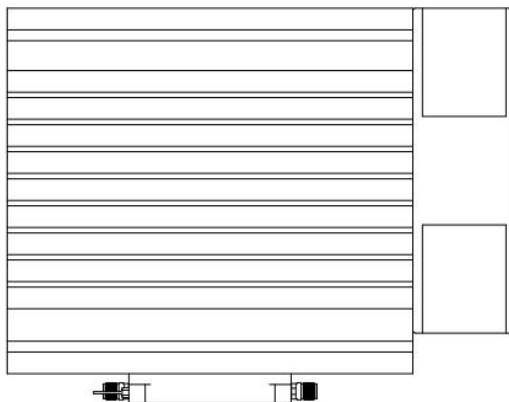
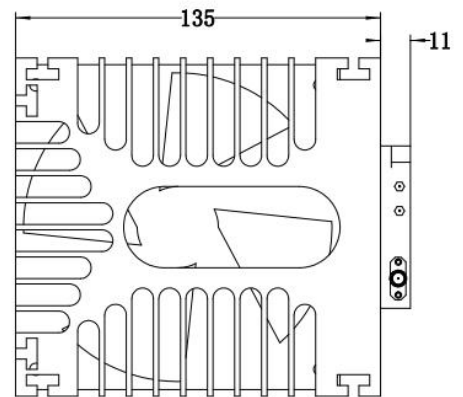
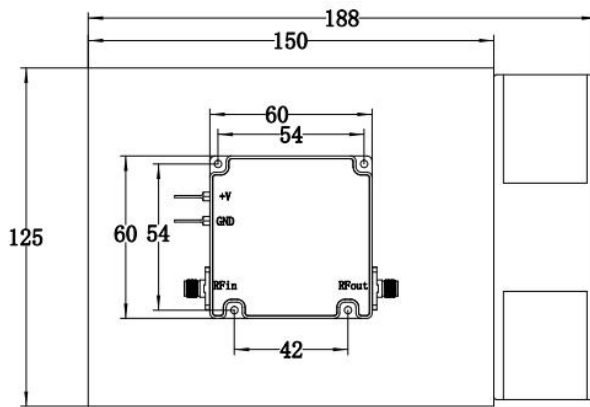
Parameter	Value
Supply Bias Voltage	+21 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-40G-50G-6-HS



Ordering Information:

Base Number	Description	Optional
PA-40G-50G-6	Power Amplifier, 40-50GHz, Gain:38dB,Psat:6W,+20V DC	Without Heatsink
PA-40G-50G-6-HS	Power Amplifier, 40-50GHz, Gain:38dB,Psat:6W,+20V DC	With Heatsink