



Power Amplifier

Model: PA-6G-12G-10

6-12GHz 10W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 6-12GHz
- High output power at saturation, 10W Typ.
- High gain, 36 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-6G-12G-10 is a power amplifier with a minimum small signal gain of 36 dB and a nominal P_{sat} of 10W across the frequency range of 6 to 12 GHz. The DC power requirement for the amplifier is +28 VDC/3.5 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 |
| Small Signal Gain | 36 | | | dB |
| Small Signal Gain Flatness | | ±2.5 | | dB |
| Output P1dB | 36 | 37 | | dBm |
| Output Psat | | 40 | | dBm |
| Spurious | | -60 | | dBc |
| Input VSWR | | 1.5 | 2 | :1 |
| DC Voltage | | +28 | | V DC |
| DC Supply Current | | 3.5 | | 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 | 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 x60 x11(Without heatsink) 188 x125 x146(With heatsink) | mm |

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

Absolute Maximum Ratings:

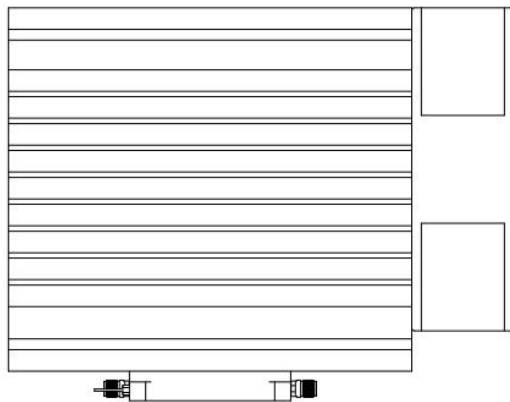
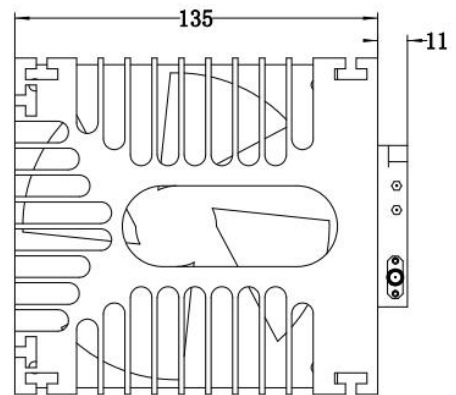
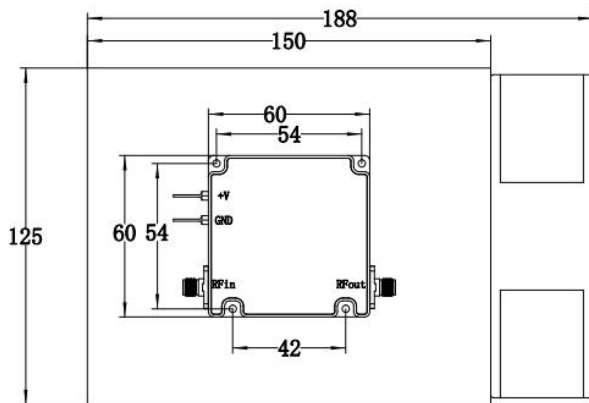
| Parameter | Value |
|-----------------------|----------------------|
| Supply Bias Voltage | +29 V |
| RF Input Power | 0 dBm |
| ESD sensitivity (HBm) | Class 0, passed 150V |



Outline Drawing:

Unit:mm

PA-6G-12G-10-HS



Ordering Information:

| Base Number | Description | Optional |
|-----------------|---|------------------|
| PA-6G-12G-10 | Power Amplifier, 6-12GHz, Gain:36dB,Psat:10W,+28V DC | Without Heatsink |
| PA-6G-12G-10-HS | Power Amplifier, 6-12GHz, Gain:36dB,Psat:10W,+28V DC | With Heatsink |