

# MODEL HILNAT1703060

## 0.1-70GHz Broadband Amplifier



Note: The photo is for illustration purposes only.  
Please refer to outline drawing

### ■ Features

- Ultra Wide Band: 0.1-70GHz
- Gain: 30dB
- Output Power: 15dBm
- High Output IP3: 25dBm

### ■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems

### □ Electrical Specifications

| Parameter                  | Min.                       | Typ. | Max | Units |
|----------------------------|----------------------------|------|-----|-------|
| Frequency Range            | 0.1-70                     |      |     | GHz   |
| Gain                       |                            | 30   |     | dB    |
| Gain Flatness              |                            | ± 3  |     | dB    |
| Input VSWR                 |                            | 10   |     | dB    |
| Output VSWR                |                            | 10   |     | dB    |
| Output Power for (P1dB)    |                            | 15   |     | dBm   |
| Output Power Past          |                            | 18   |     | dBm   |
| Noise Figure               |                            | 6    |     | dB    |
| Output IP3                 |                            | 25   |     | dBm   |
| Input Max Power(no damage) |                            |      | -10 | dBm   |
| DC Current (Vcc=+12V)      |                            | 300  |     | mA    |
| Impedance                  | 50                         |      |     | Ω     |
| Input Output Connector     | 1.85-K                     |      |     |       |
| Material                   | Aluminium\Gold Painting    |      |     |       |
| Weight                     | 50g                        |      |     |       |
| Package Sealing            | General Sealing (Standard) |      |     |       |

### Environmental Conditions

|                         |              |           |   |
|-------------------------|--------------|-----------|---|
| Operational Temperature | -25°C~+70°C  | Vibration | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |
| Storage Temperature     | -55°C~+125°C | Shock     | 20G for 11msc half sin wave, 3 axis both directions |
| Executive Standard      | MIL-STD-810G | Humidity  | 100% RH at 35c, 95%RH at 40°C                       |

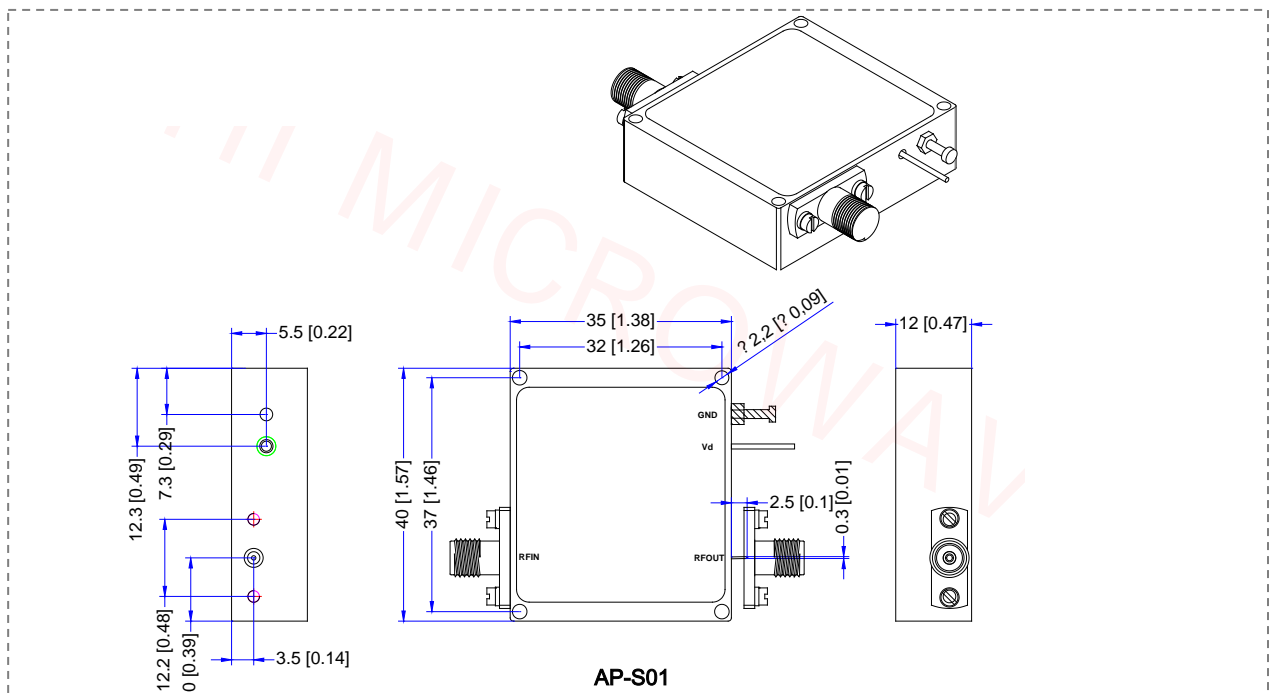
### Absolute Maximum Ratings

|                       |                      |
|-----------------------|----------------------|
| Supply Bias Voltage   | +13V                 |
| RF INPUT POWER        | -10dBm               |
| ESD sensitivity (HBm) | Class 0, passed 150V |



### Outline Drawing

All Dimensions in mm ( inches ) Tolerance  $\pm 0.25$  ( 0.01 )



**\*\*\*Heat Sink required during operation\*\*\***