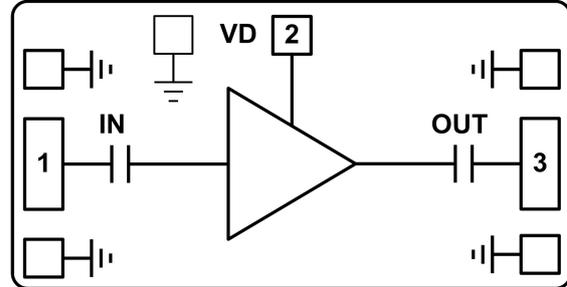




主要特点

- 工作频率: 0.8 - 22 GHz
- 增益: 18 dB
- 噪声系数: 2.5 dB
- P1dB: +23.5 dBm @ VDD=+8V
- Psat: +25.5 dBm @ VDD=+8V
- 供电: +8/+10/+12 V @ 155 mA
- 输入/输出: 50 Ohm 匹配
- 芯片尺寸: 3 × 1.3 × 0.1 mm<sup>3</sup>

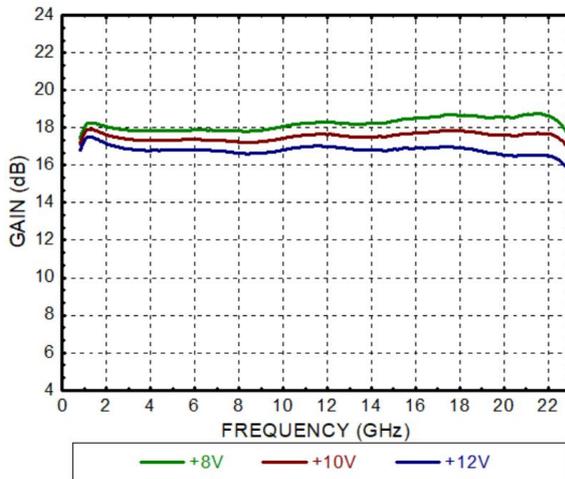
功能框图



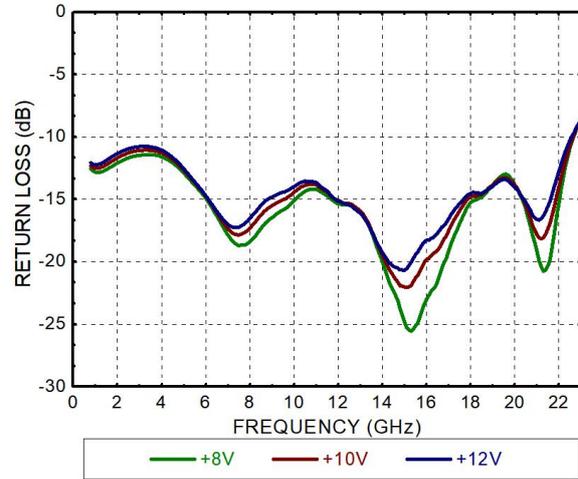
性能指标 (T<sub>A</sub> = +25°C, I<sub>DD</sub> = 155 mA\*)

参数	VDD=+8V			VDD=+10V			VDD=+12V			单位
	最小	典型	最大	最小	典型	最大	最小	典型	最大	
频率范围	0.8-22			0.8-22			0.8-22			GHz
增益		18			17.5			17		dB
增益平坦度		±0.3			±0.3			±0.3		dB
输入回波损耗		15			15			15		dB
输出回波损耗		15			14			13		dB
输出功率 1dB 压缩点		23.5			24.5			25.5		dBm
饱和功率		25.5			26.5			27.5		dBm
输出 IP3		33			34			35		dBm
噪声系数		2.5			2.7			3		dB
工作电流	130	155	180	140	165	190	150	175	200	mA

增益 VS VDD

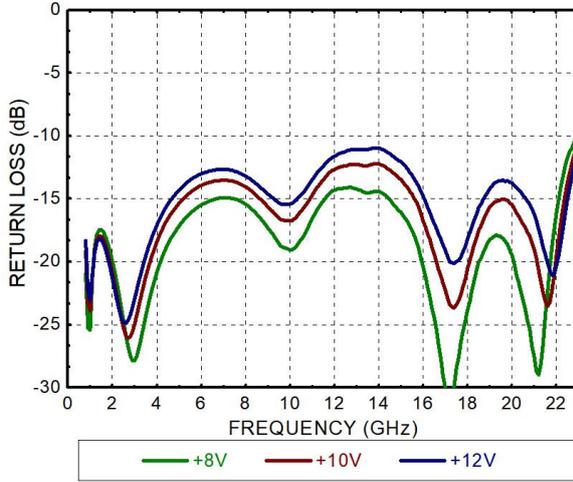


输入回波损耗 VS VDD

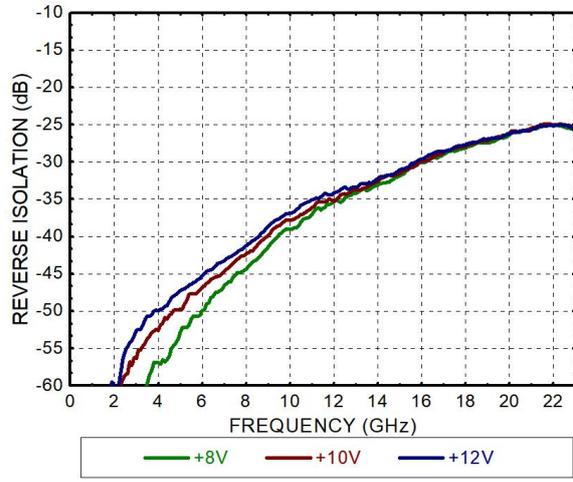




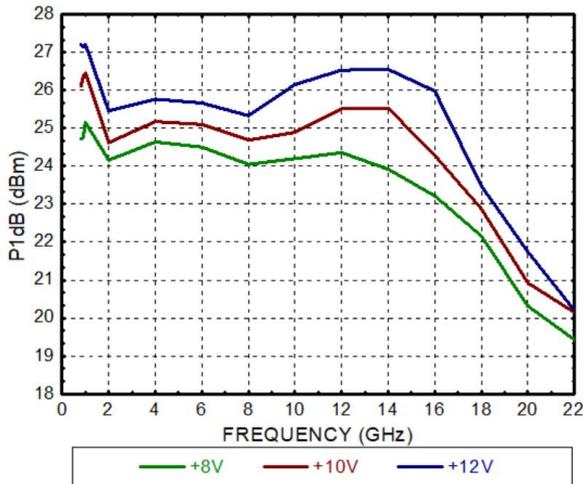
### 输出回波损耗 VS VDD



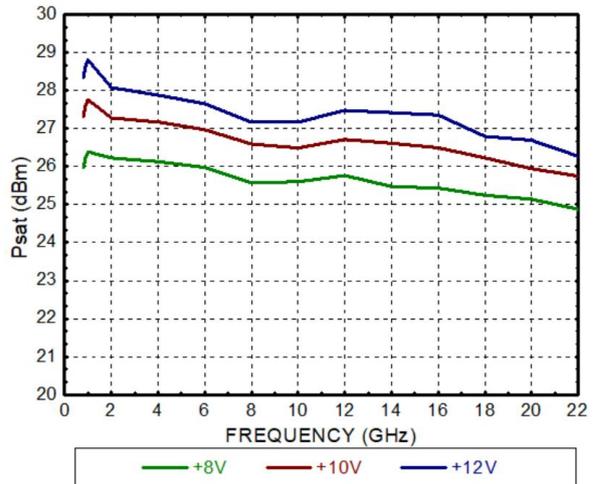
### 反向隔离度 VS VDD



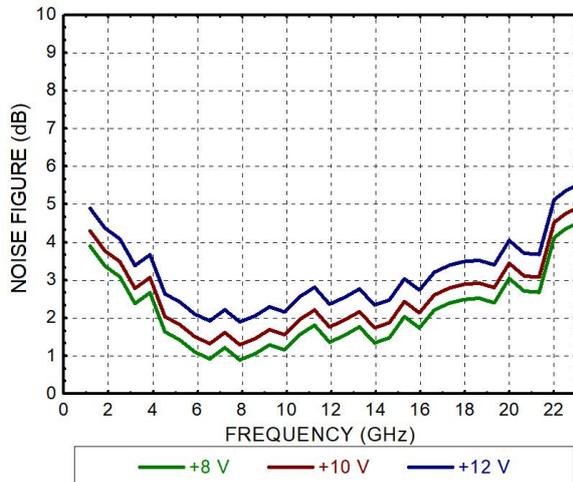
### 输出功率P1dB VS VDD



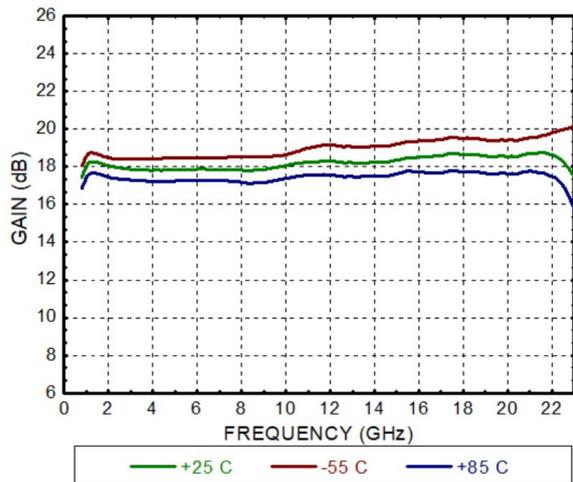
### 输出功率Psat VS VDD



### 噪声系数 VS VDD

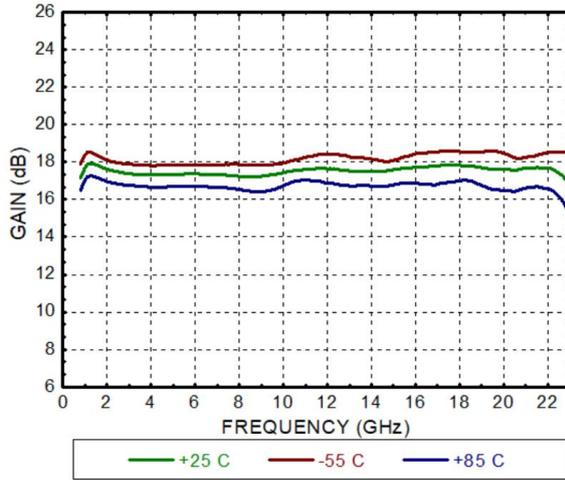


### 增益 VS 温度 VDD=+8V

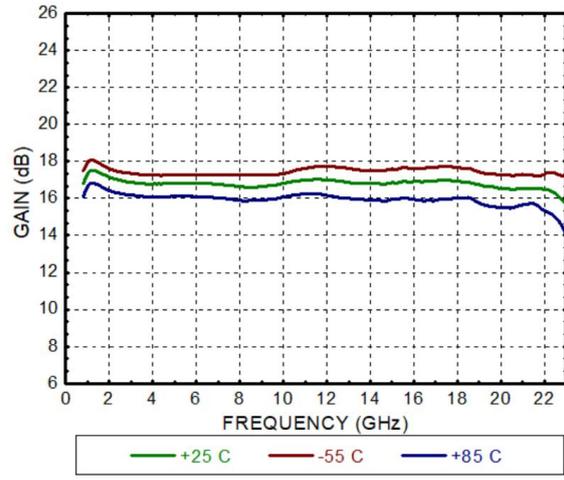




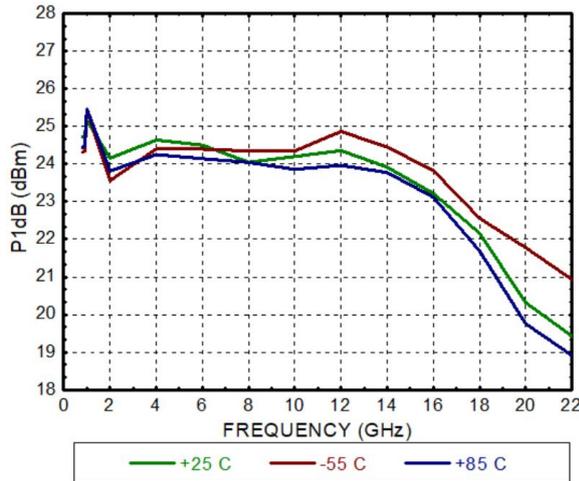
增益 VS 温度 VDD=+10V



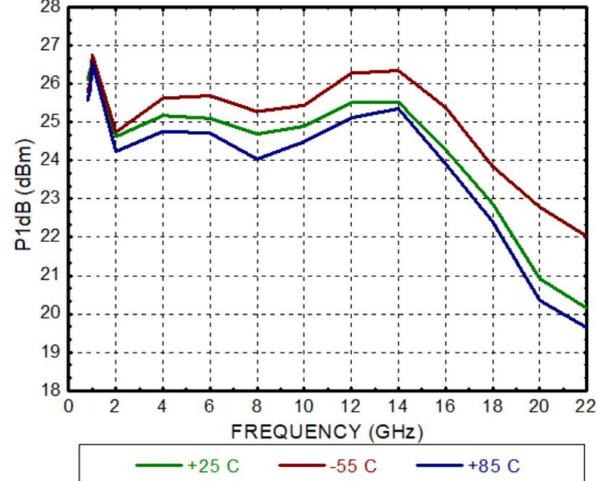
增益 VS 温度 VDD=+12V



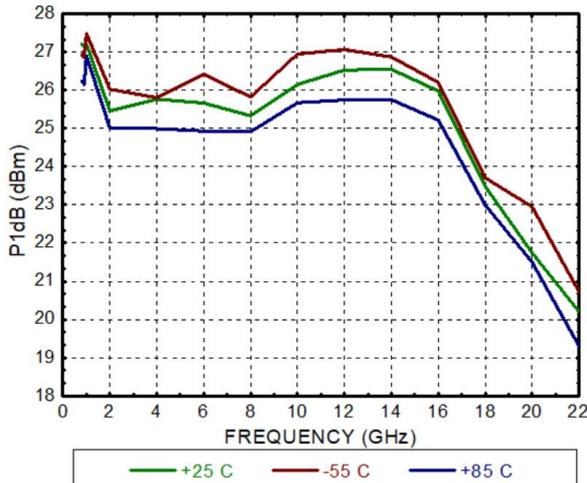
输出功率 $P_{1dB}$  VS 温度 VDD=+8V



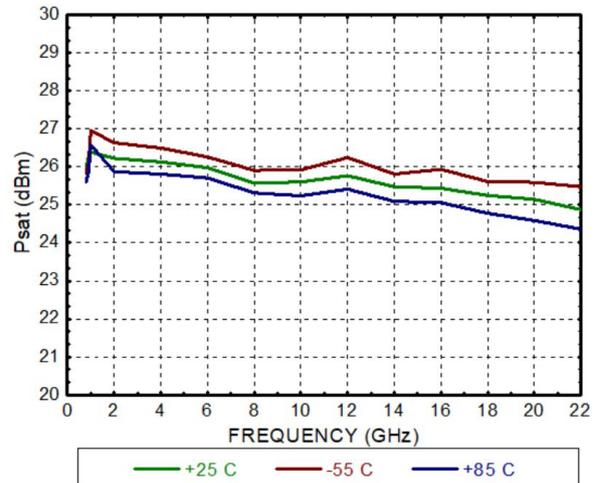
输出功率 $P_{1dB}$  VS 温度 VDD=+10V



输出功率 $P_{1dB}$  VS 温度 VDD=+12V

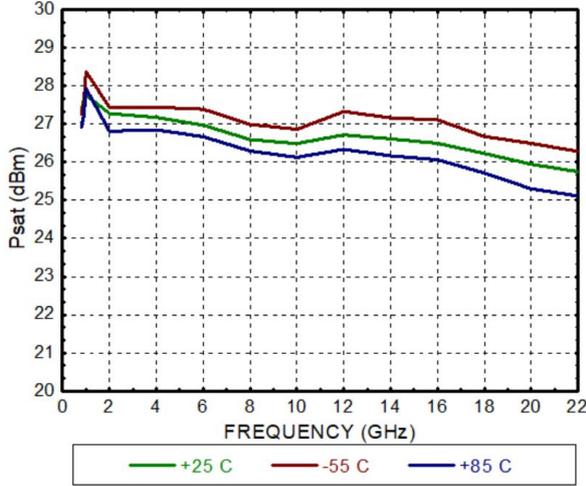


饱和输出功率 VS 温度 VDD=+8V

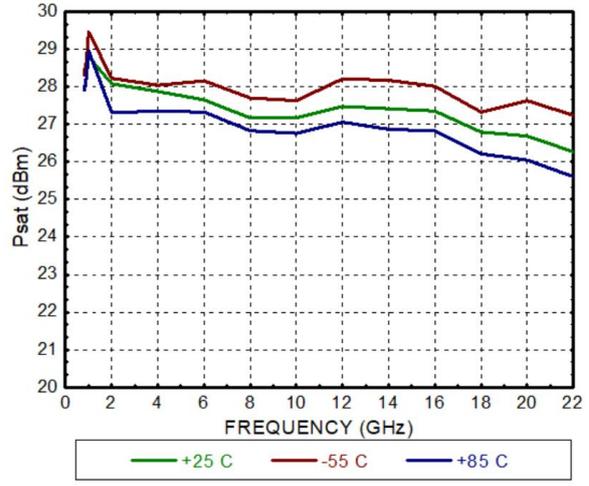




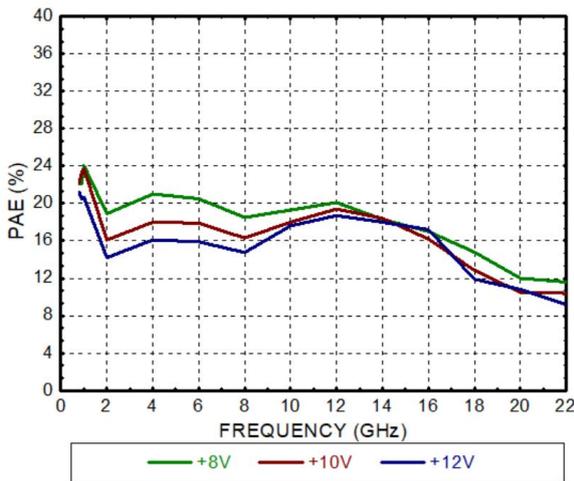
饱和输出功率 VS 温度 VDD=+10V



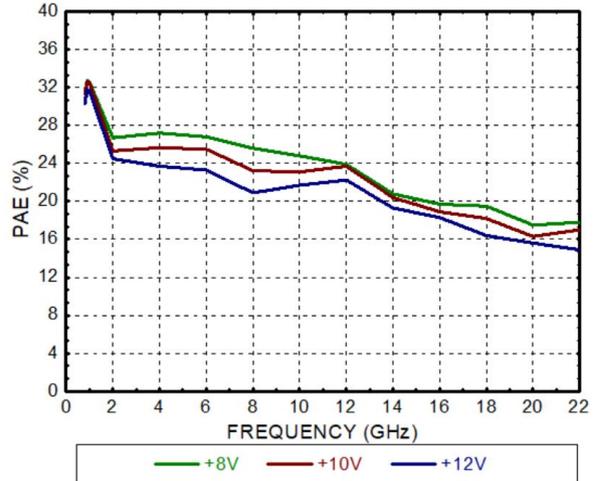
饱和输出功率 VS 温度 VDD=+12V



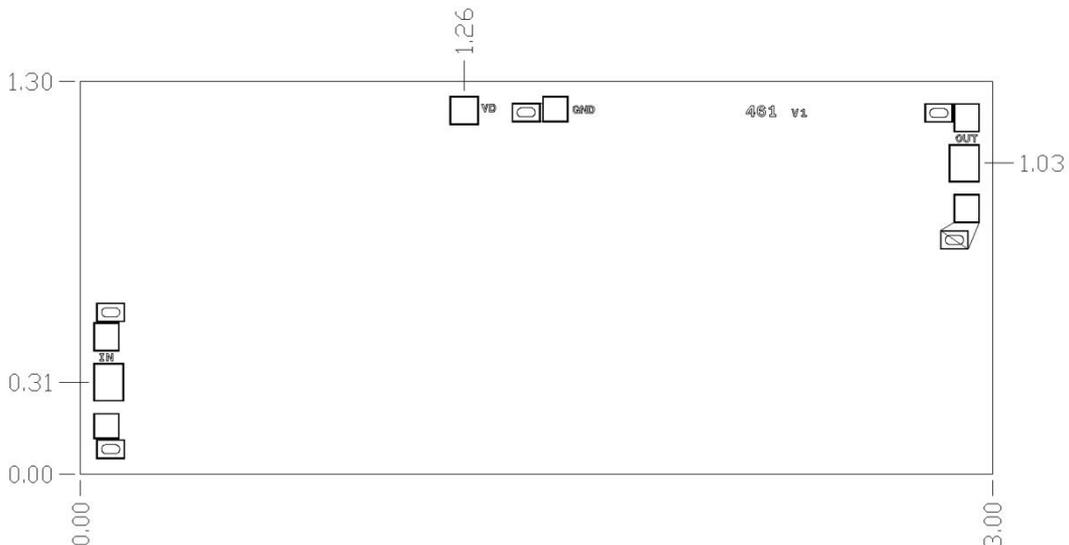
PAE @ P1dB



PAE @ Psat



### 物理参数

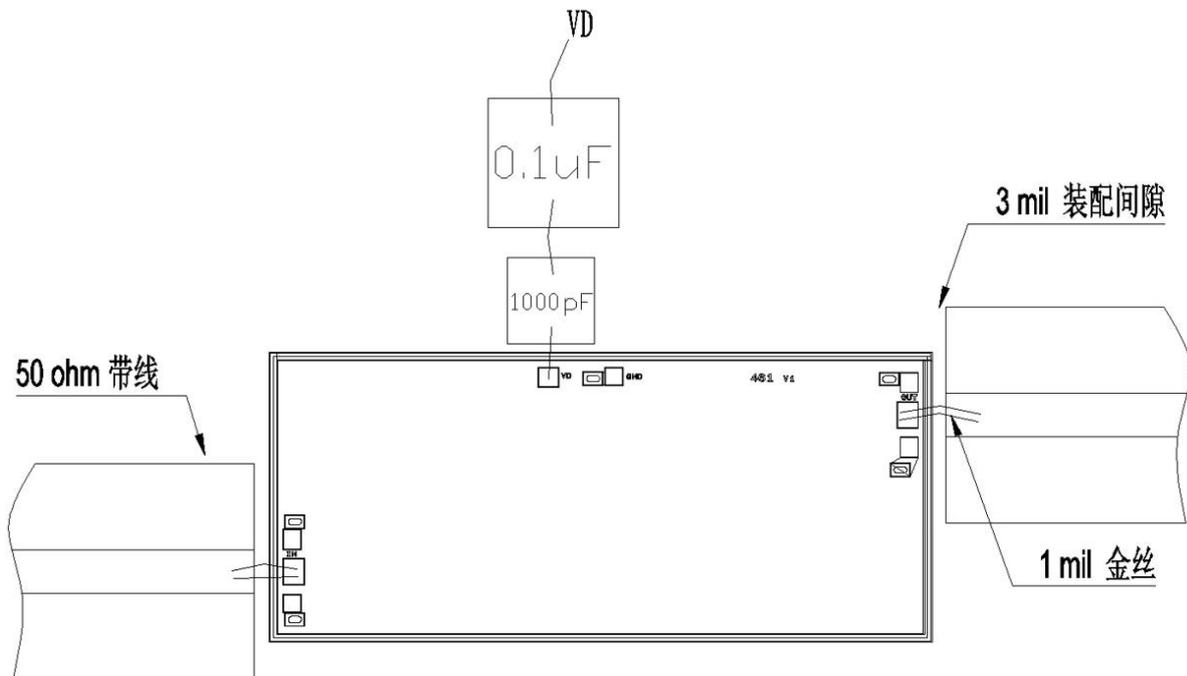




## 焊盘描述

焊盘序号	功能	描述
1	IN	该焊盘是 AC 耦合，匹配至 50 Ohm
2	VD	该焊盘是电源端口，需要外接 1000pF 旁路电容
3	OUT	该焊盘是 AC 耦合，匹配至 50 Ohm
芯片背面	GND	芯片背面必须连接至 RF/DC 地

## 装配图



### 注意事项

1. 芯片厚度为 100  $\mu\text{m}$
2. 典型键合焊盘尺寸为  $120 \times 90 \mu\text{m}^2$
3. 键合焊盘金属化: 金
4. 芯片背面镀金
5. 芯片背面接地
6. 未标注的键合焊盘不需要连接
7. 本产品采用空气桥工艺，表面不带钝化层

### 极限参数

1. 电源电压: +12.5 V
2. 射频输入功率: +20 dBm
3. 储存温度:  $-65 \sim +150 \text{ }^\circ\text{C}$
4. 工作温度:  $-55 \sim +85 \text{ }^\circ\text{C}$