

### Features

- Frequency:2.4~2.5GHz
- Gain:21dB
- OP<sub>-1dB</sub>:40dBm
- Supply Current:800mA
- Hermetic Laser Sealing
- Size:52.9mm×32mm×10mm

### Typical Applications

- Microwave radio
- Telecommunication
- Test instrumentation
- Military

### General Description

SAC1239 is a Power amplifier module with a typical small signal gain of 21dB and a nominal OP<sub>-1dB</sub> of +40dBm across the frequency range of 2.4to 2.5GHz.

SAC1239 is integrated with SUPERAPEX proprietary GaAs MMIC amplifier chip, high frequency microelectronic assembly techniques, and high reliability design to realize optimum wideband operation.

### Electrical Performance ( $T_A=25^{\circ}\text{C}$ , $I_D=800\text{mA}$ , $Z_0=50\Omega$ )

Parameter	Min.	Typ.	Max.	Units
Frequency Range	2.4~2.5			GHz
Gain	20	21	22	dB
Gain Flatness	—	—	±1.5	dB
Output Power for 1 dB Compression (OP <sub>-1dB</sub> )	40	—	—	dBm
Output IP <sub>3</sub>	—	44	—	dBm
Input VSWR	—	1.5	2.0	:1
Output VSWR	—	1.8	2.0	:1
Enable Voltage	1.5	2.0	2.5	V
Enable Current	60	100	200	uA
Supply Voltage	22	—	26	V
Supply Current	—	800	1000	mA

### Mechanical Specifications

Parameter	
Input/Output	SMA(F) Field-replaceable
Bias	Pin /Case ground
Case Material	6061 Aluminum alloy
Weight	< 50g

# SAC1239

**Power Amplifier Module**  
2.4~2.5GHz

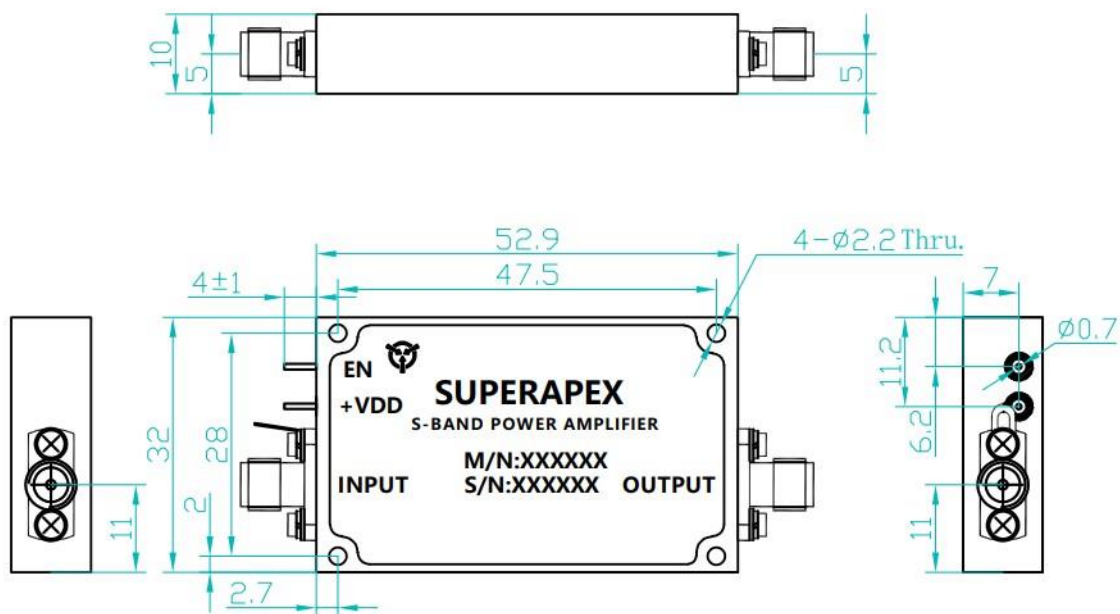
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## Absolute Maximum Ratings

Maximum Input Power	+27dBm	Operating Temperature	-40°C~+85°C
Maximum Supply Voltage	+30V	Storage Temperature	-55°C~+125°C

## Mechanical Outline

All dimensions are in millimeters



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