

Features

- Frequency: 27.5~30GHz
- Gain: 23dB
- OP_{-1dB}: 34.5dBm
- Noise Figure: 6dB.
- Hermetic Laser Sealing
- Size: 40x40x10mm

Typical Applications

- Microwave radio
- Telecommunication
- Test instrumentation
- Military

General Description

SAC1179 is a Ka-band amplifier module with a typical small signal gain of 23dB and a nominal OP_{-1dB} of +34.5dBm across the frequency range of 27.5 to 30GHz

SAC1179 is integrated with SUPERAPEX proprietary GaAs MMIC amplifier chip, high frequency microelectronic assembly techniques, and high reliability design to realize high output power, wideband operation

Electrical Performance (T_A=25°C, I_b=2.5A, Z_o=50Ω)

Parameter	Min.	Typ.	Max.	Units
Frequency Range	27.5 ~ 30			GHz
Gain	20	23	-	dB
Gain Flatness	-	±1	±2	dB
Noise Figure	-	6	-	dB
Output Power for 1 dB Compression (OP _{-1dB})	34	34.5	-	dBm
Output IP ₃	-	38	-	dBm
Input VSWR	-	1.5	2	:1
Output VSWR	-	2	3	:1
No damage load mismatch	-	-	2.5	:1
Supply Voltage	5	-	6.5	V
Supply Current	-	3	4	A

Mechanical Specifications

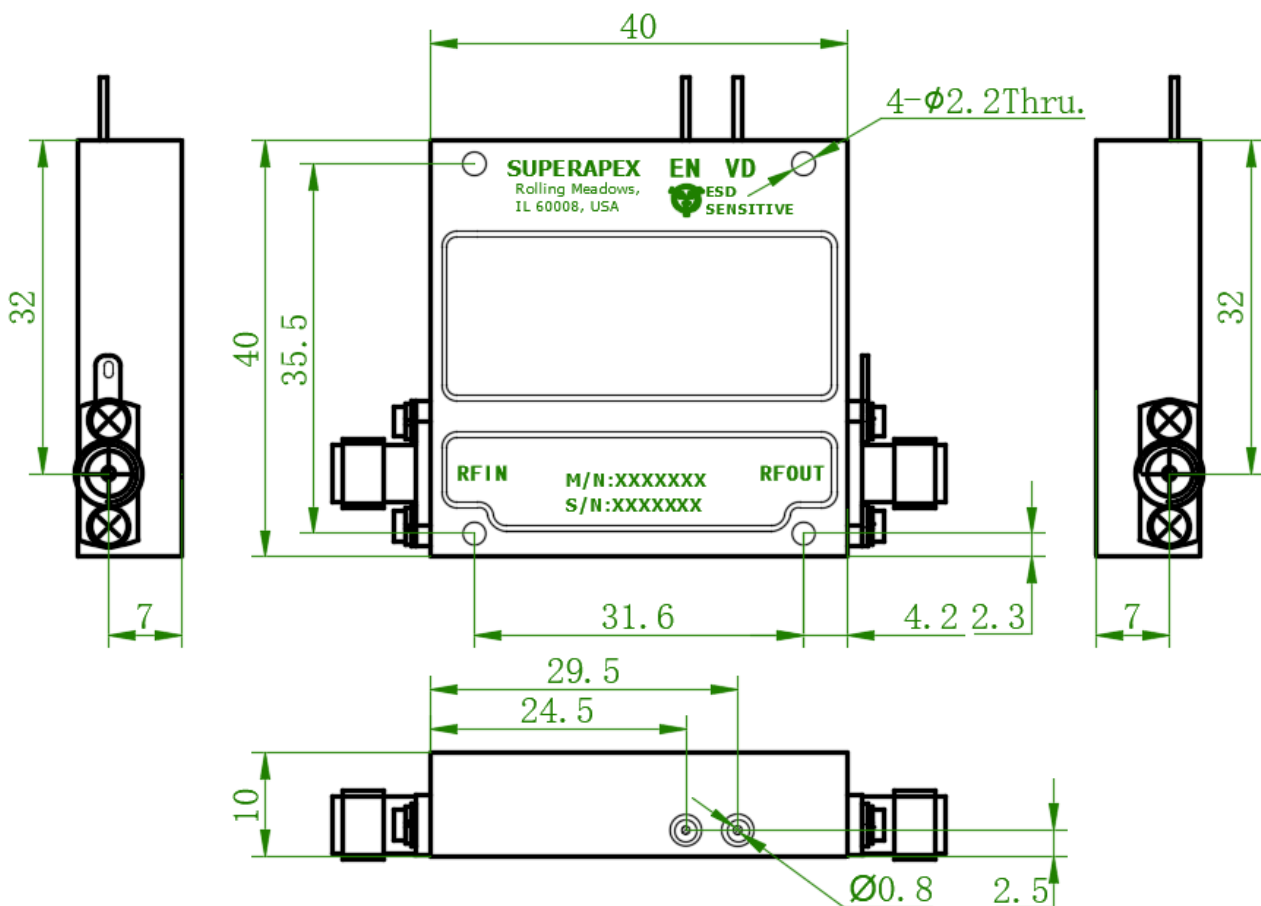
Parameter	
Input/Output	K(F) Field-replaceable
Bias	Pin/Case ground
Case Material	4047 Aluminum alloy
Weight	85g

Absolute Maximum Ratings

Maximum Input Power	+17dBm	Operating Temperature	-40°C~+70°C
Channel Temperature	+150°C	Storage Temperature	-65°C~+150°C

Mechanical Outline

All dimensions are in millimeters

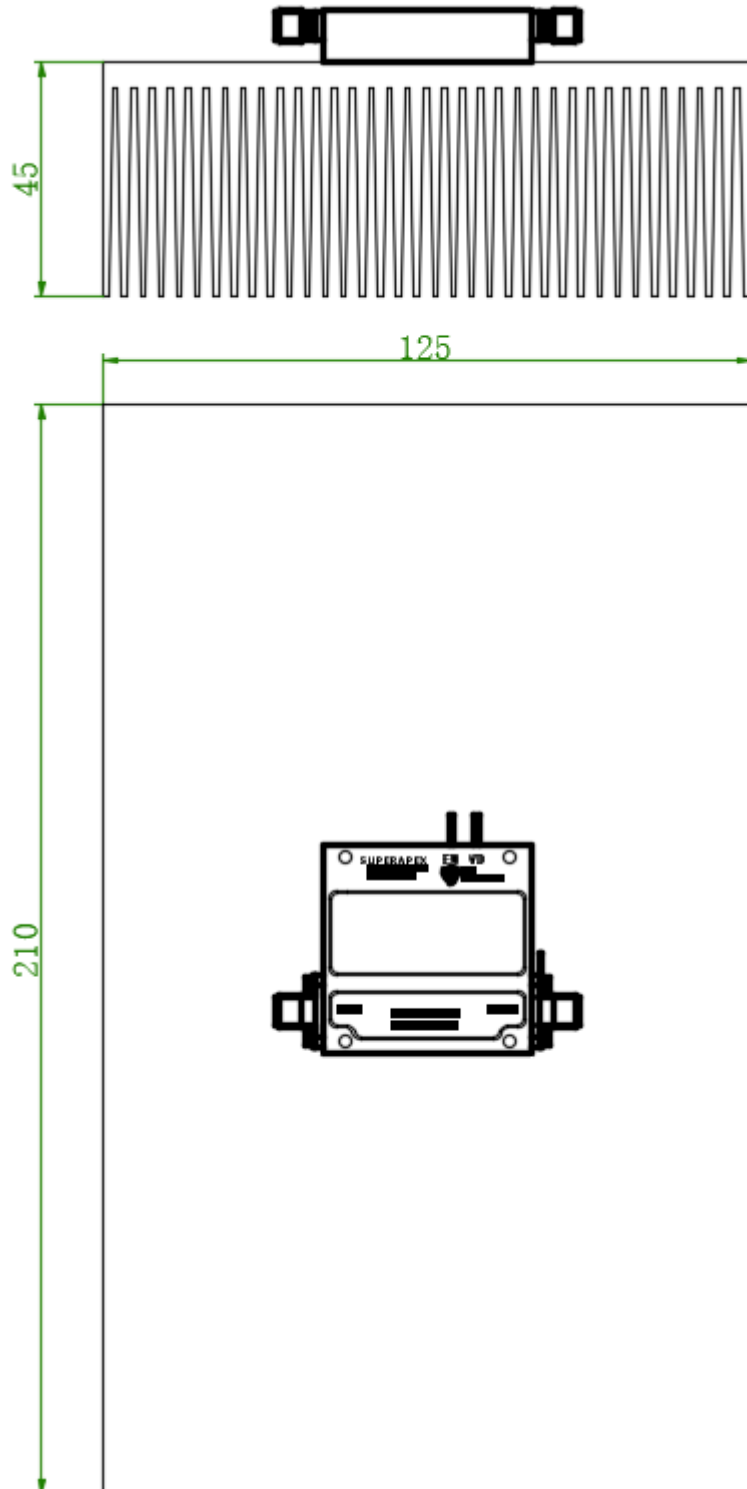


EN: 0 ~ 0.5V Amplifier is turn off
4.5~5V Amplifier is turn on
Apply VD before EN

SAC1179

Ka band Power Amplifier Module
27~31GHz

Rev 1.0



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