

# HVM14SR

Silicon Epitaxial Planar PIN Diode for High Frequency Attenuator

# HITACHI

ADE-208-084C(Z)

Rev.3

Feb.1999

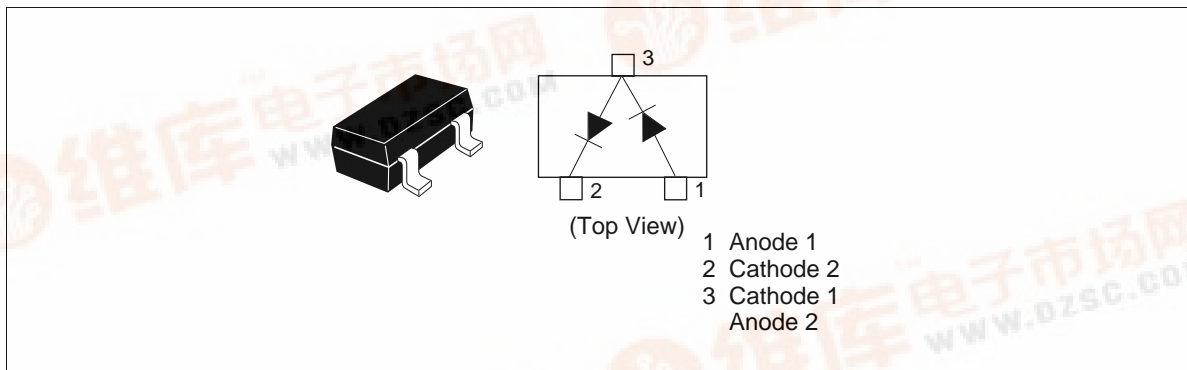
## Features

- Low forward resistance. ( $r_f = 7.0\Omega_{max}$ )
- Low capacitance. ( $C = 0.25pF$  typ)
- MPAK package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HVM14SR	H7	MPAK

## Outline



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## HVM14SR

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### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	50	V
Forward current	I <sub>F</sub>	50	mA
Power dissipation	P <sub>d</sub> <sup>*1</sup>	100	mW
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55to+125	°C

Note: 1. Two device total.

### Electrical Characteristics (Ta = 25°C) \*2

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V <sub>F</sub>	—	—	1.0	V	I <sub>F</sub> = 50 mA
Reverse current	I <sub>R</sub>	—	—	100	nA	V <sub>R</sub> = 50V
Capacitance	C	—	0.25	—	pF	V <sub>R</sub> = 50V, f = 1 MHz
Forward resistance	r <sub>f</sub>	—	—	7	Ω	I <sub>F</sub> = 10 mA, f = 100 MHz
ESD-Capability <sup>*1</sup>	—	200	—	—	V	C=200pF, Both forward and reverse direction 1 pulse

Note: 1. Failure criterion ; I<sub>R</sub> ≥ 200nA at VR =50 V

Note: 2. Per one device.

Main Characteristic

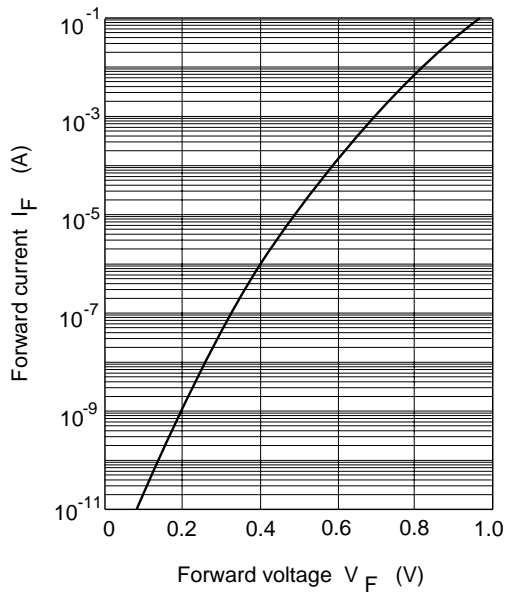


Fig.1 Forward current Vs. Forward voltage

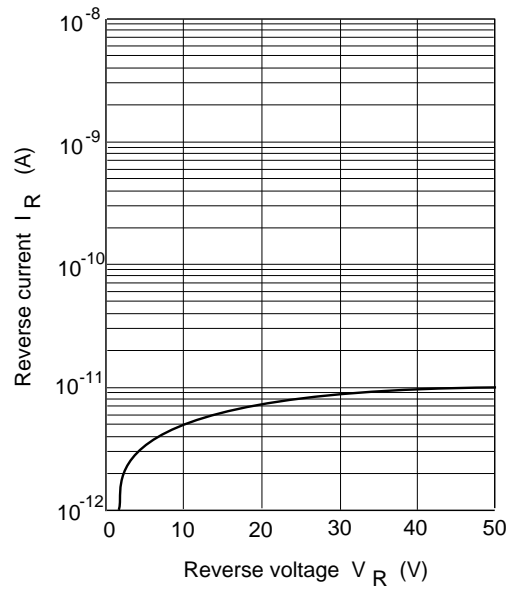


Fig.2 Reverse current Vs. Reverse voltage

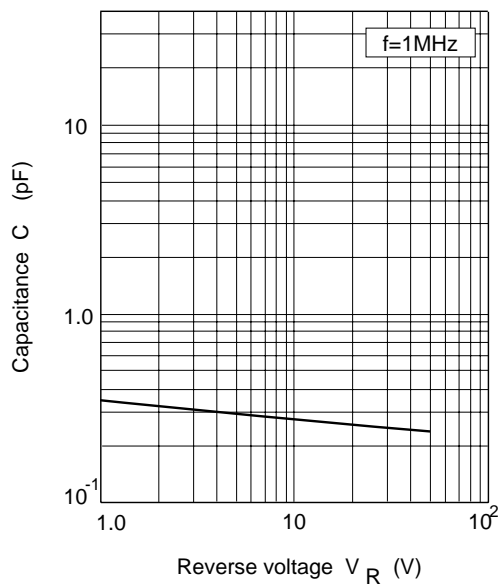


Fig.3 Capacitance Vs. Reverse voltage

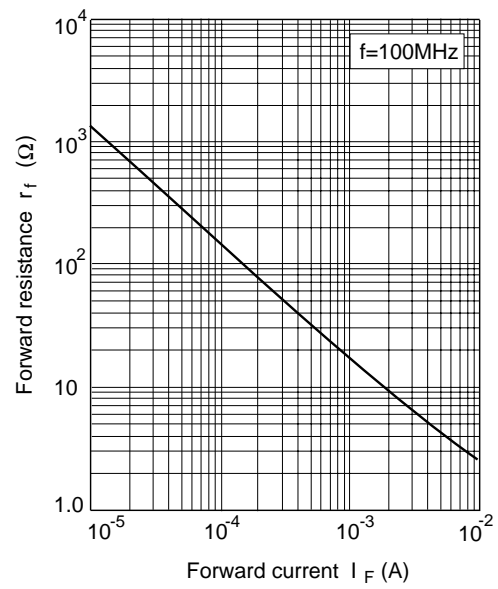
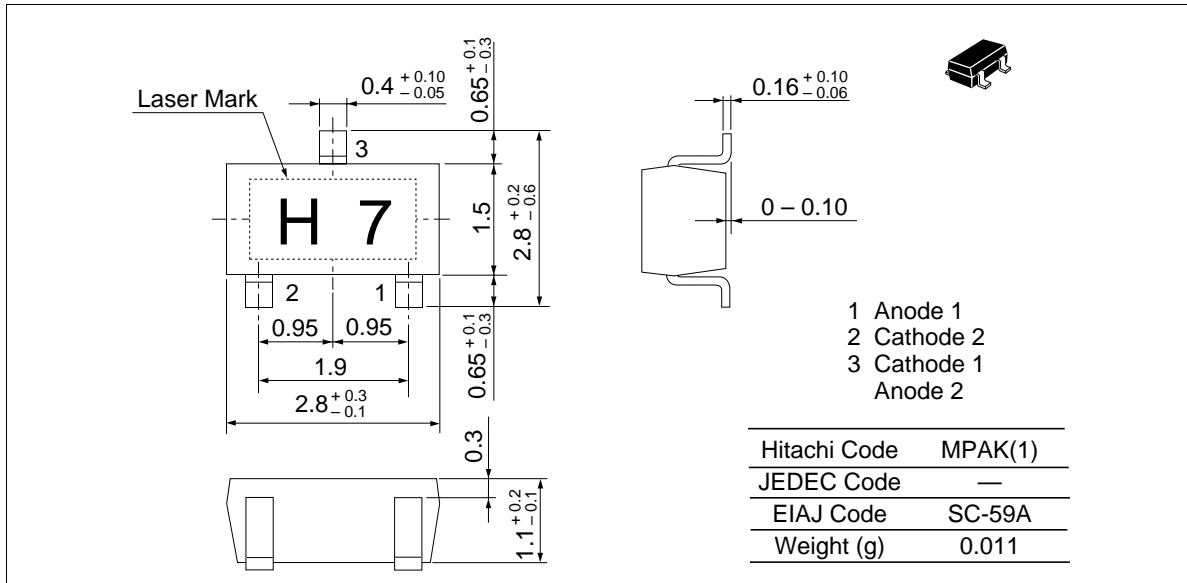


Fig.4 Forward resistance Vs. Forward current

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## Package Dimensions

Unit : mm



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## Cautions

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