

# HVD131

Silicon Epitaxial Planar Pin Diode for High Frequency Switching

# HITACHI

ADE-208-832 (Z)

Rev 0

Nov. 1999

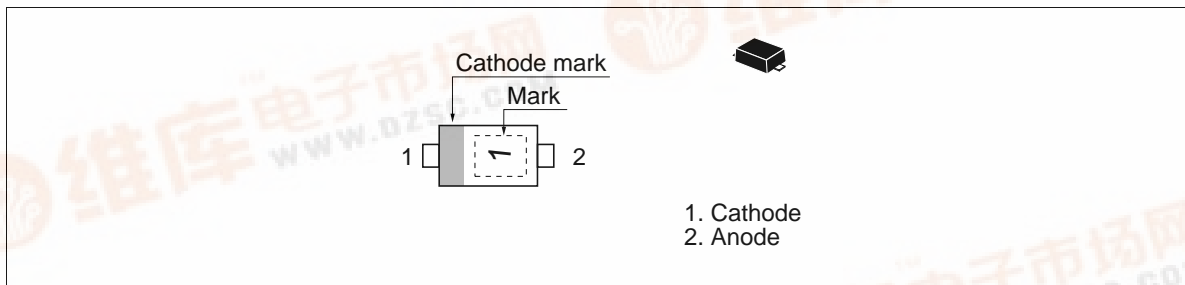
## Features

- Low capacitance. (C=0.8pF max)
- Low forward resistance. ( $r_f=1.0\Omega$  max)
- Super small Flat Package (SFP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HVD131	1	SFP

## Outline



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## HVD131

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

Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	65	V
Reverse voltage	$V_R$	60	V
Forward current	$I_F$	100	mA
Power dissipation	$P_d$	150	mW
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	$I_R$	—	—	0.1	$\mu$ A	$V_R = 60V$
Forward voltage	$V_F$	—	—	1.0	V	$I_F = 10\text{ mA}$
Capacitance	C	—	—	0.8	pF	$V_R = 1V, f = 1\text{ MHz}$
Forward resistance	$r_f$	—	—	1.0	$\Omega$	$I_F = 10\text{ mA}, f = 100\text{ MHz}$

Note: Please mount soldering SFP by the reflow. ( Reflow condition: 235°C max, for 10 seconds )  
Do not use the soldering iron because soldering SFP causes package a big heat stress.

Main Characteristic

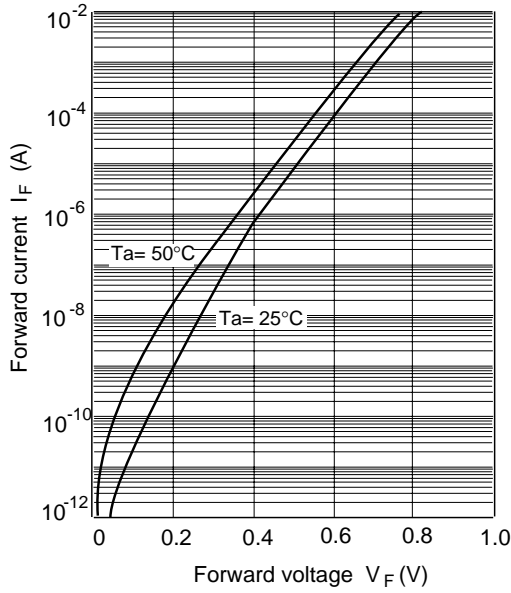


Fig.1 Forward current Vs. Forward voltage

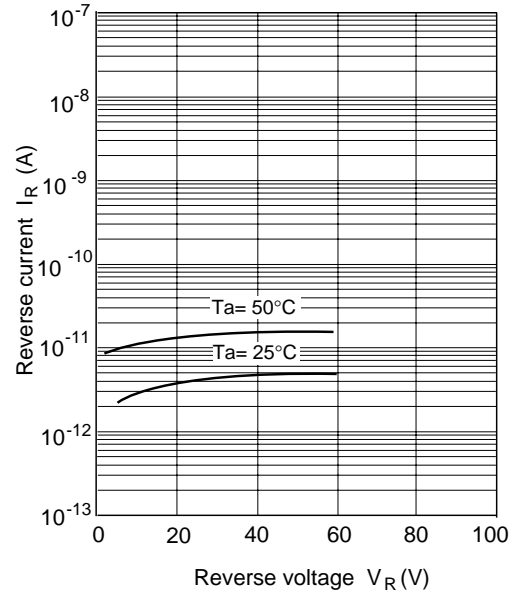


Fig.2 Reverse current Vs. Reverse voltage

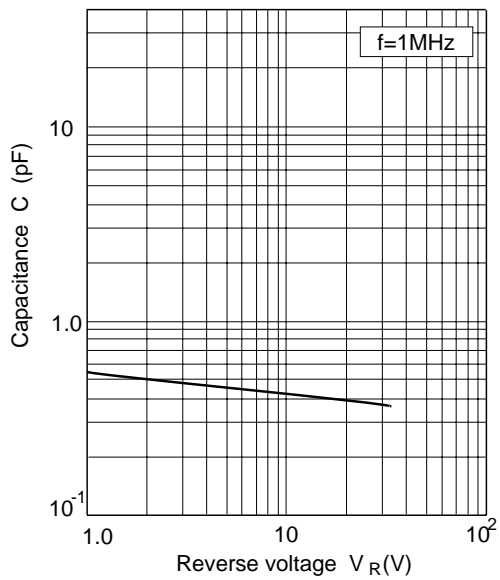


Fig.3 Capacitance Vs. Reverse voltage

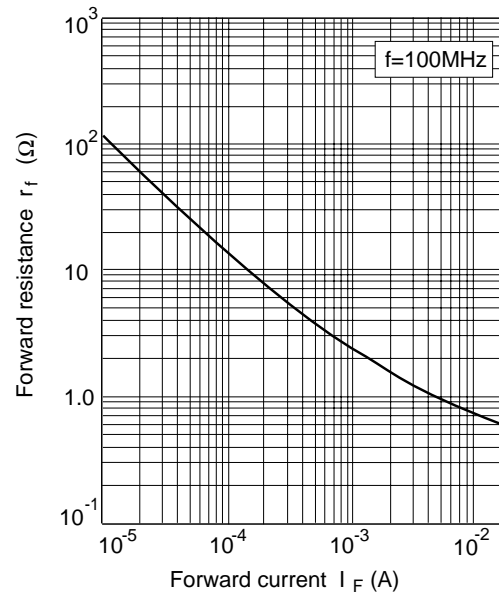


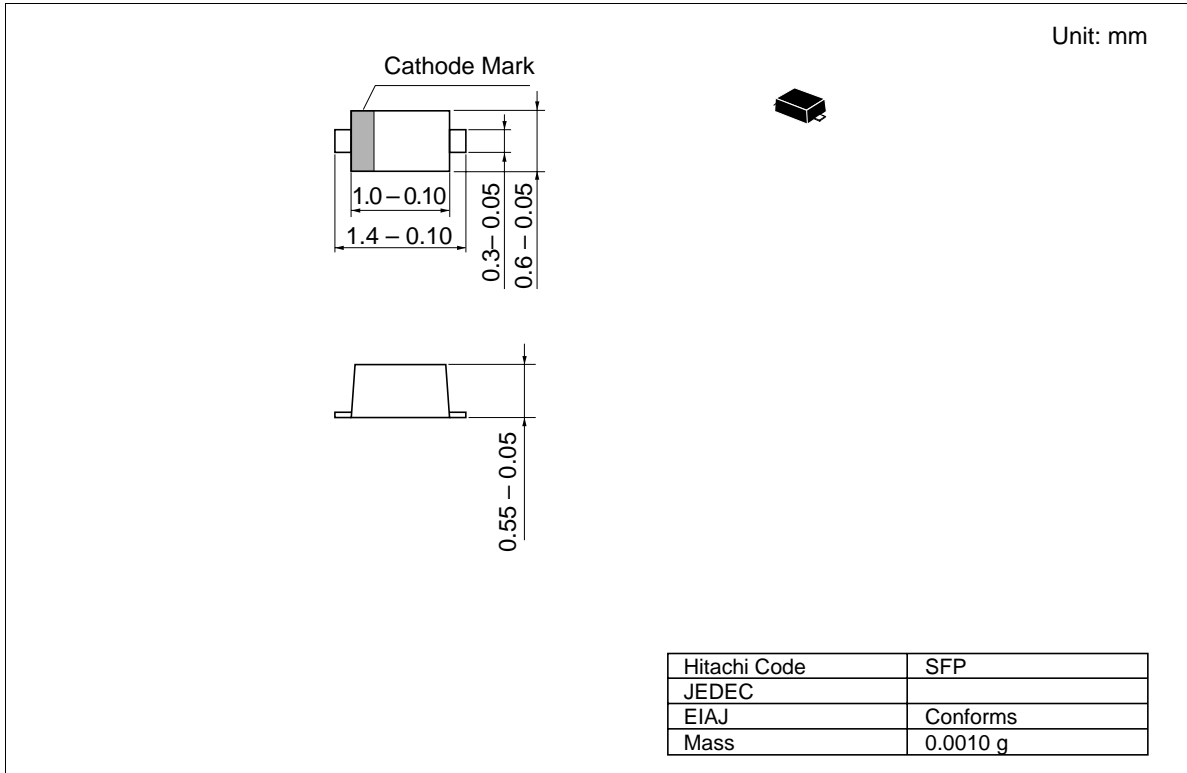
Fig.4 Forward resistance Vs. Forward current

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## Package Dimensions



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