

# HVC133

Silicon Epitaxial Planar Pin Diode for High Frequency Switching

# HITACHI

ADE-208-423B(Z)  
Rev. 2  
Feb 2000

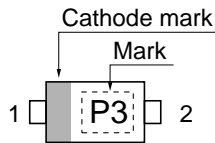
## Features

- Low capacitance. ( $C_1=1.0\text{pF}$  max)
- Low forward resistance. ( $r_f=0.7\Omega$  max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HVC133	P3	UFP

## Outline



1. Cathode
2. Anode

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

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	30	V
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 voltage	$V_R$	30	—	—	V	$I_R = 1\mu A$
Reverse current	$I_R$	—	—	100	nA	$V_R = 25V$
Forward voltage	$V_F$	—	—	0.85	V	$I_F = 2 mA$
Capacitance	$C_1$	—	—	1.0	pF	$V_R = 1V, f = 1 MHz$
	$C_6$	—	—	0.9		$V_R = 6V, f = 1 MHz$
Forward resistance	$r_f$	—	0.55	0.7	$\Omega$	$I_F = 2mA, f = 100 MHz$

Main Characteristic

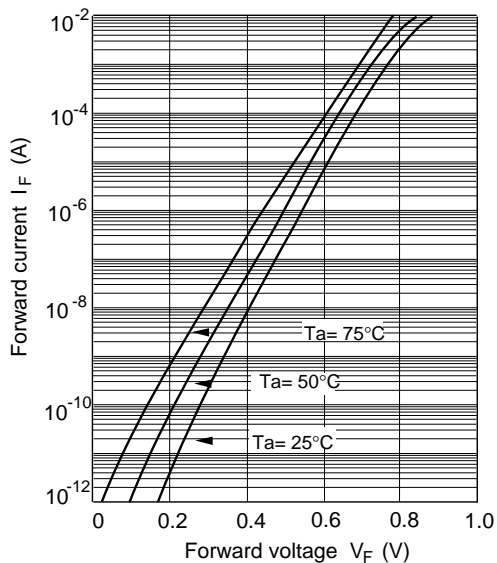


Fig.1 Forward current Vs. Forward voltage

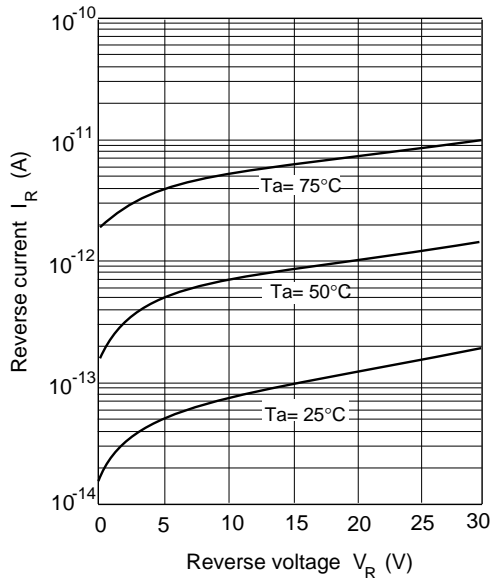


Fig.2 Reverse current Vs. Reverse voltage

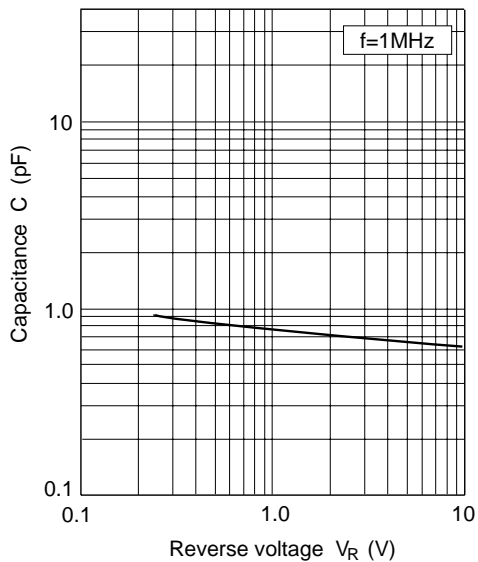


Fig.3 Capacitance Vs. Reverse voltage

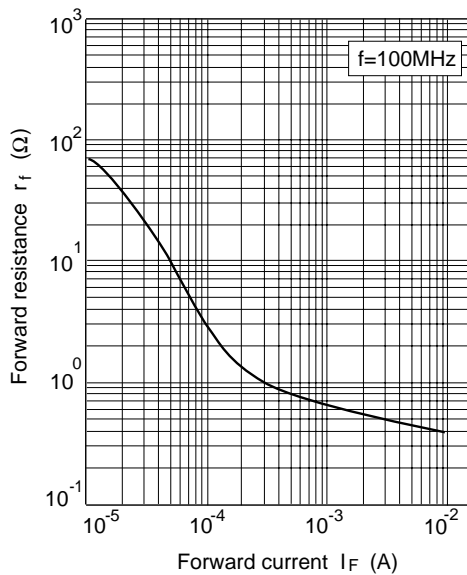
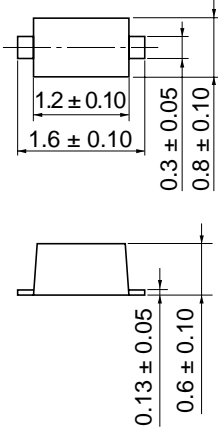


Fig.4 Forward resistance Vs. Forward current

## Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass	0.0016 g

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