

HVC133

Silicon Epitaxial Planar Pin Diode for High Frequency Switching

HITACHI

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

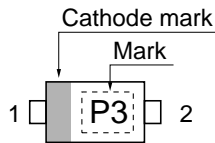
Features

- 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	$I_F = 2\text{ mA}$
Capacitance	C_1	—	—	1.0	pF	$V_R = 1V, f = 1\text{ MHz}$
	C_6	—	—	0.9		$V_R = 6V, f = 1\text{ MHz}$
Forward resistance	r_f	—	0.55	0.7	Ω	$I_F = 2\text{ mA}, f = 100\text{ MHz}$

Main Characteristic

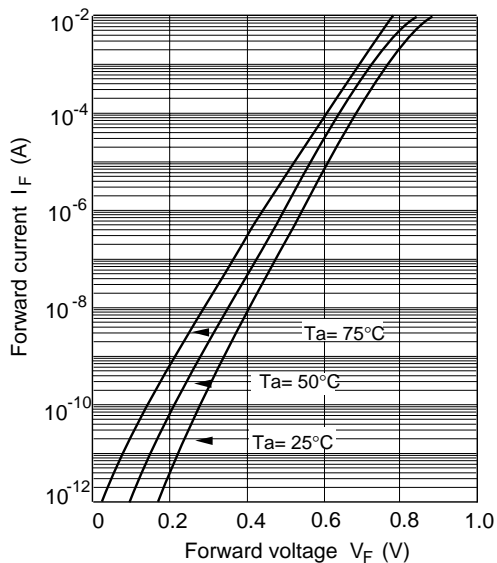


Fig.1 Forward current Vs. Forward voltage

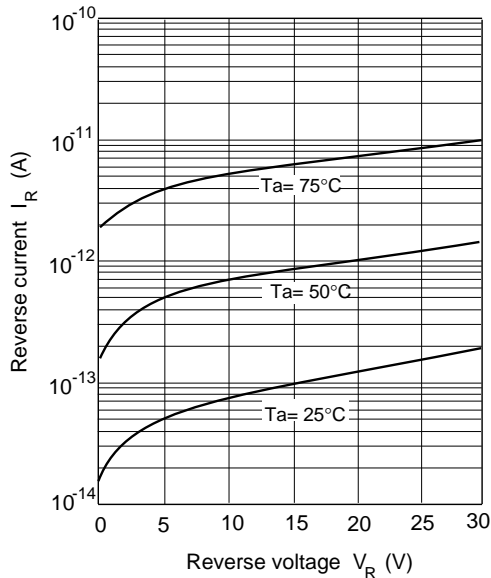


Fig.2 Reverse current Vs. Reverse voltage

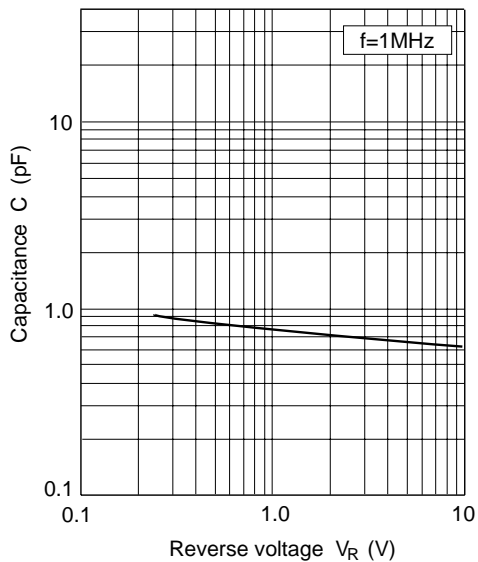


Fig.3 Capacitance Vs. Reverse voltage

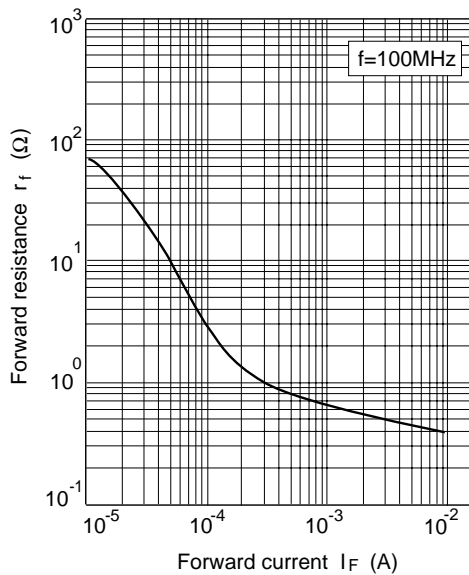
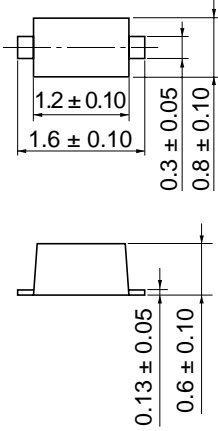


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass	0.0016 g

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