
HVC133

Silicon Epitaxial Planar Pin Diode for High Frequency Switching

HITACHI

ADE-208-423B(Z)

Rev. 2
Feb. 2000

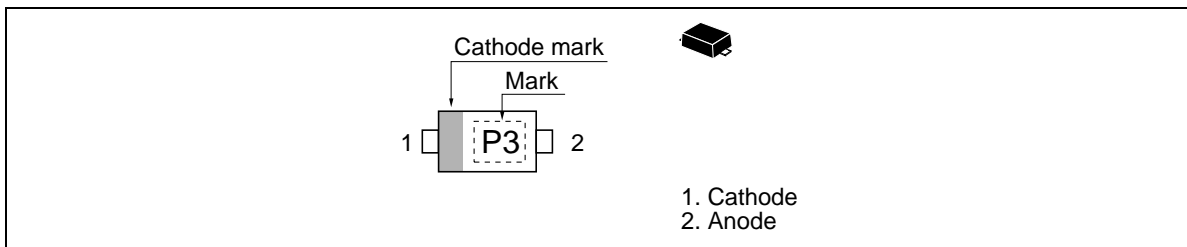
Features

- Low capacitance.(C1=1.0pF max)
- Low forward resistance. (rf=0.7Ω max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC133	P3	UFP

Outline



HVC133

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

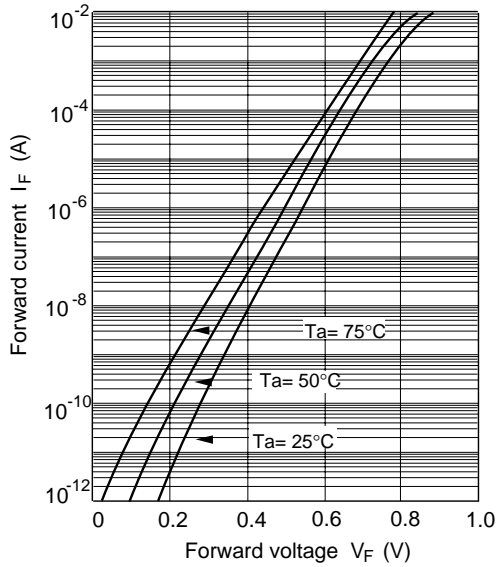


Fig.1 Forward current Vs. Forward voltage

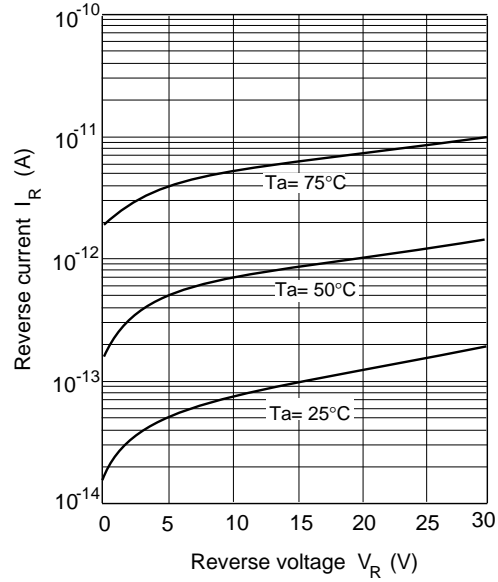


Fig.2 Reverse current Vs. Reverse voltage

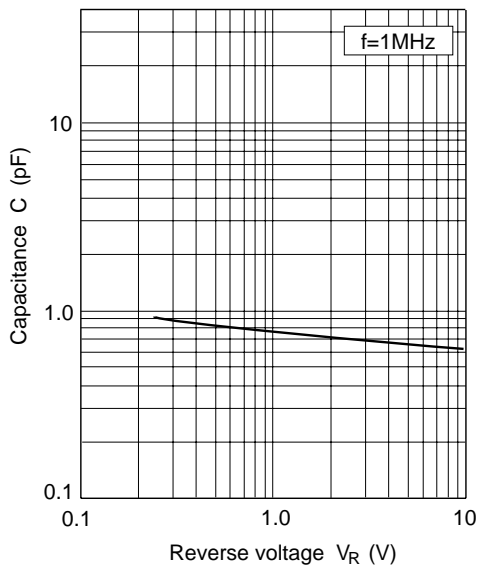


Fig.3 Capacitance Vs. Reverse voltage

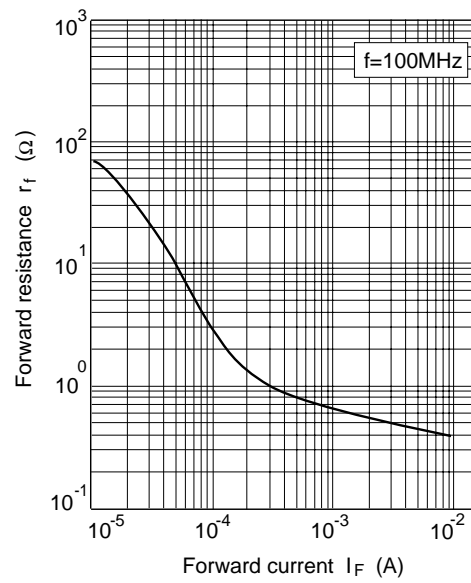
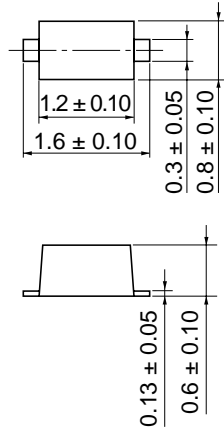


Fig.4 Forward resistance Vs. Forward current

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Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass	0.0016 g

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