

HVC131

Silicon Epitaxial Planar Pin Diode for Antenna Switching

HITACHI

Rev. 0
Nov. 1995

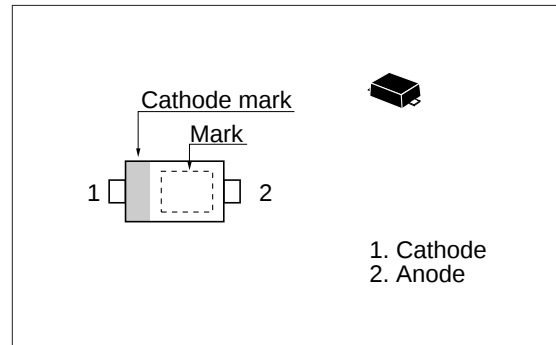
Features

- Low capacitance. ($C=0.8\text{pF}$ max)
- Low forward resistance. ($r_f=1.0\Omega$ max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC131	P1	UFP

Outline



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	65	V
Reverse voltage	V_R	60	V
Forward current	I_F	50	mA
Power dissipation	P_d	100	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

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

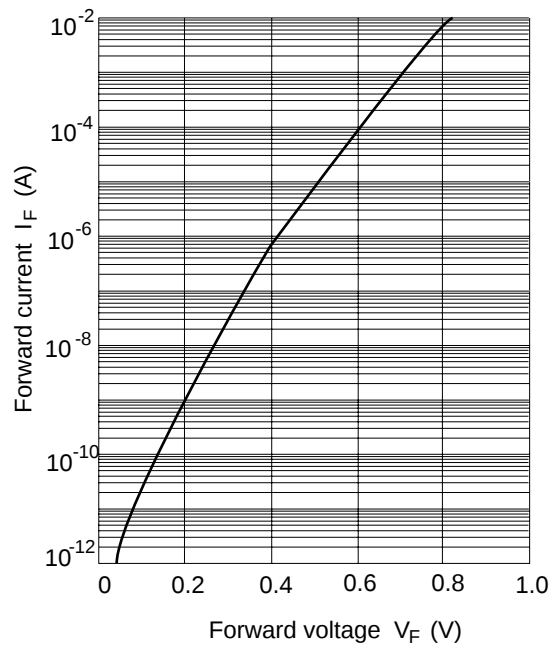


Fig.1 Forward current Vs. Forward voltage

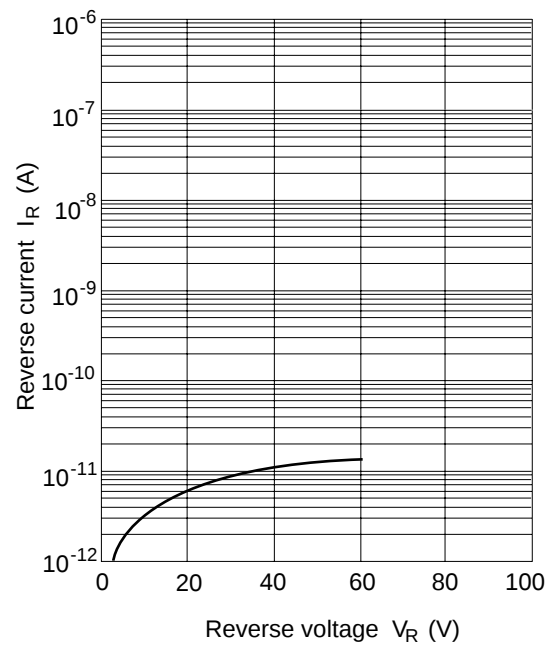


Fig.2 Reverse current Vs. Reverse voltage

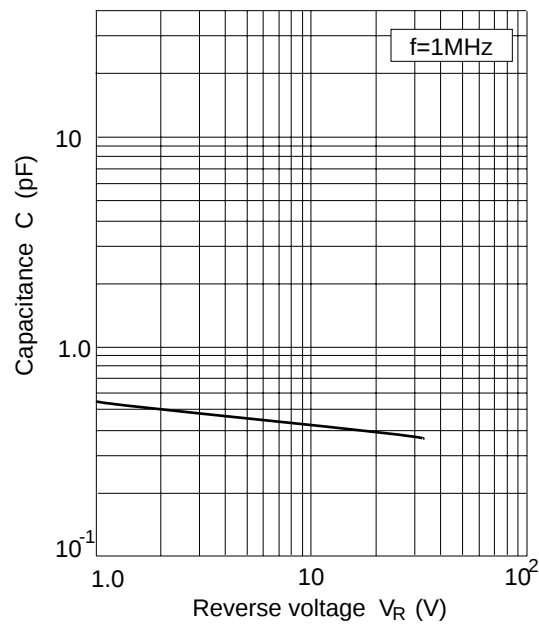


Fig.3 Capacitance Vs. Reverse voltage

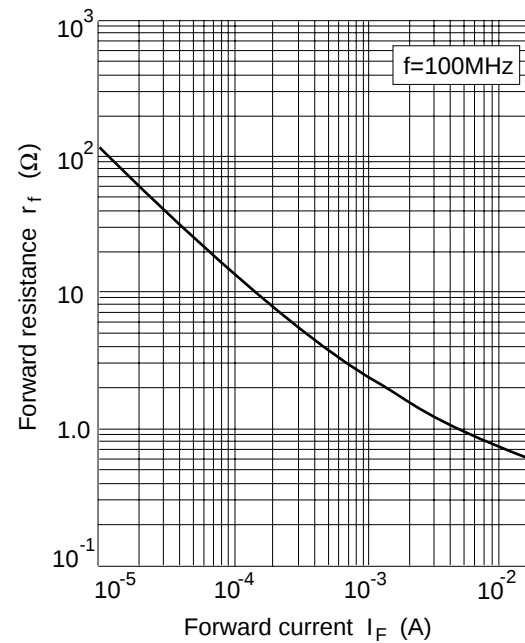
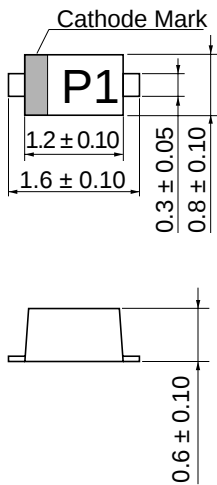


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

HITACHI Code	UFP
JEDEC Code	—
EIAJ Code	SC-79
Weight (g)	0.0016