

To all our customers

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Renesas Technology Corp.  
Customer Support Dept.  
April 1, 2003

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Keep safety first in your circuit designs!

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Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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# HVC131

Silicon Epitaxial Planar Pin Diode for High Frequency Switching



ADE-208-422B (Z)

Rev. 2  
Feb. 2000

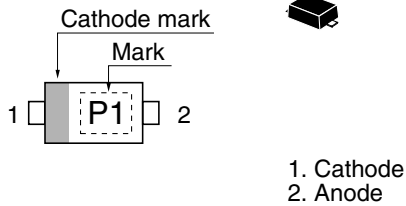
## Features

- 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

## Pin Arrangement



## 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	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

## Electrical Characteristics

(Ta = 25°C)

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

Main Characteristic

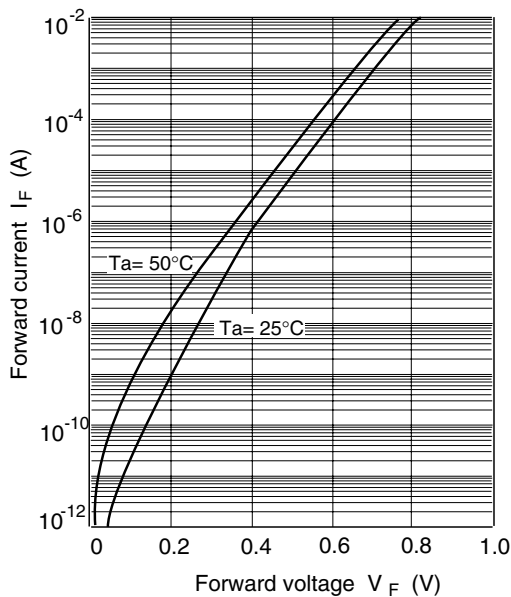


Fig.1 Forward current Vs. Forward voltage

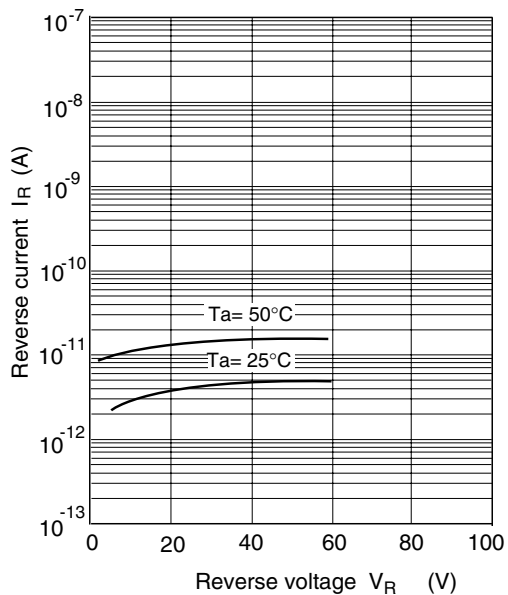


Fig.2 Reverse current Vs. Reverse voltage

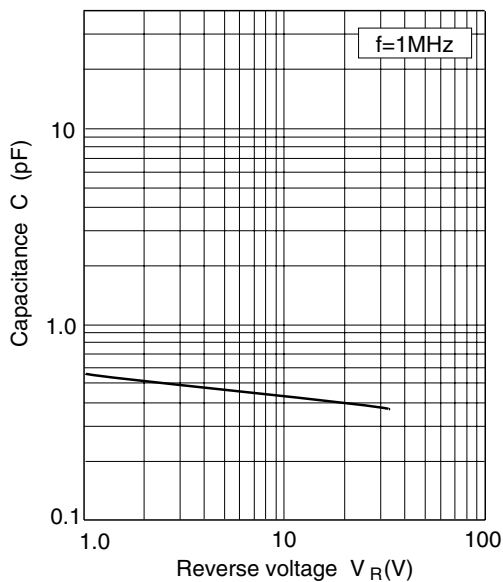


Fig.3 Capacitance Vs. Reverse voltage

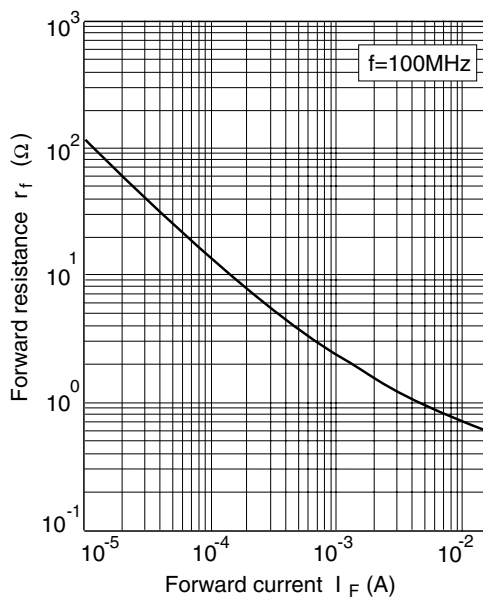
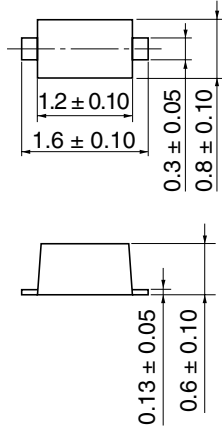


Fig.4 Forward resistance Vs. Forward current

## Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass	0.0016 g

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## Sales Offices

# HITACHI

### Hitachi, Ltd.

Semiconductor & Integrated Circuits

Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

Tel: (03) 3270-2111 Fax: (03) 3270-5109

URL	NorthAmerica	: <a href="http://semiconductor.hitachi.com/">http://semiconductor.hitachi.com/</a>
	Europe	: <a href="http://www.hitachi-eu.com/hel/ecg">http://www.hitachi-eu.com/hel/ecg</a>
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### For further information write to:

Hitachi Semiconductor  
(America) Inc.  
179 East Tasman Drive  
San Jose, CA 95134  
Tel: <1> (408) 433-1990  
Fax: <1> (408) 433-0223

Hitachi Europe Ltd.  
Electronic Components Group  
Whitebrook Park  
Lower Cookham Road  
Maidenhead  
Berkshire SL6 8YA, United Kingdom  
Tel: <44> (1628) 585000  
Fax: <44> (1628) 585200

Hitachi Europe GmbH  
Electronic Components Group  
Dornacher Straße 3  
D-85622 Feldkirchen, Munich  
Germany  
Tel: <49> (89) 9 9180-0  
Fax: <49> (89) 9 29 30 00

Hitachi Asia Ltd.  
Hitachi Tower  
16 Collyer Quay #20-00  
Singapore 049318  
Tel: <65>-538-6533/538-8577  
Fax: <65>-538-6933/538-3877  
URL: <http://www.hitachi.com.sg>

Hitachi Asia Ltd.  
(Taipei Branch Office)  
4/F, No. 167, Tun Hwa North Road  
Hung-Kuo Building  
Taipei (105), Taiwan  
Tel: <886>-(2)-2718-3666  
Fax: <886>-(2)-2718-8180  
Telex: 23222 HAS-TP  
URL: <http://www.hitachi.com.tw>

Hitachi Asia (Hong Kong) Ltd.  
Group III (Electronic Components)  
7/F., North Tower  
World Finance Centre,  
Harbour City, Canton Road  
Tsim Sha Tsui, Kowloon  
Hong Kong  
Tel: <852>-(2)-735-9218  
Fax: <852>-(2)-730-0281  
URL: <http://semiconductor.hitachi.com.hk>

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