To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: http://www.renesas.com

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

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Renesas Technology Home Page: http://www.renesas.com

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

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HVC133

Silicon Epitaxial Planar Pin Diode for High Frequency Switching

ADE-208-423B (Z)

Rev. 2
Feb. 2000

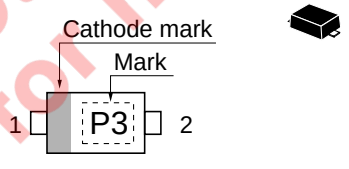
Features

- 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

Pin Arrangement



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	Tj	125	°C
Storage temperature	Tstg	–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 = 1µA
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	Ω	I_F = 2mA, f = 100 MHz

Main Characteristic

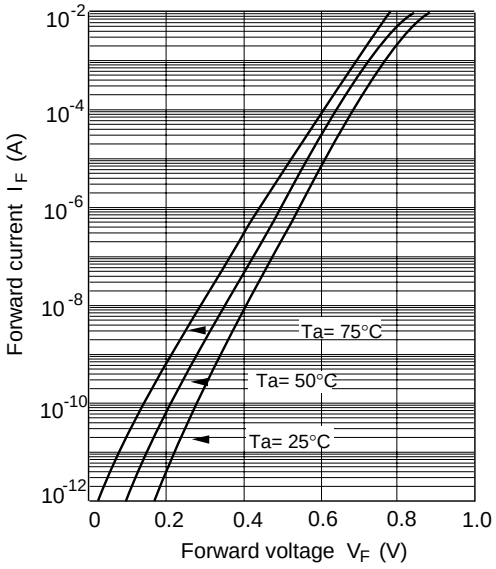


Fig.1 Forward current Vs. Forward voltage

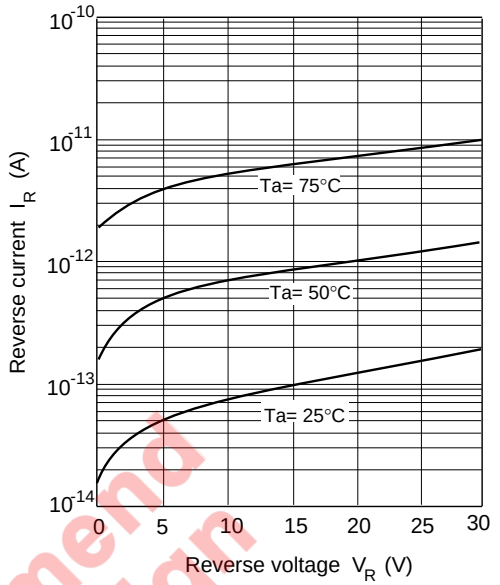


Fig.2 Reverse current Vs. Reverse voltage

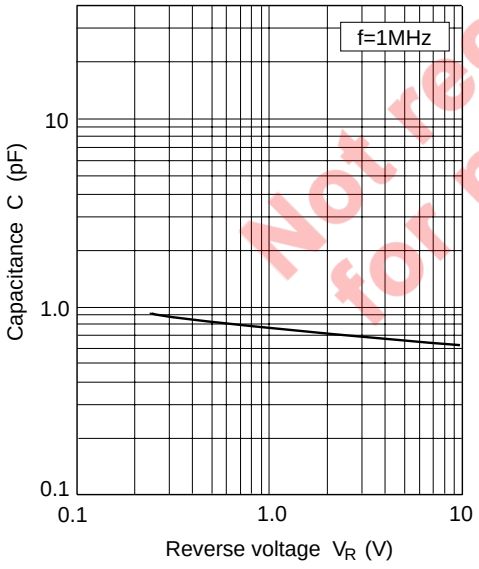


Fig.3 Capacitance Vs. Reverse voltage

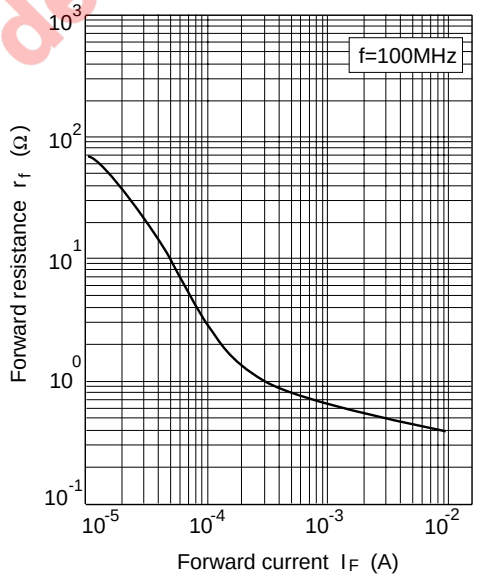
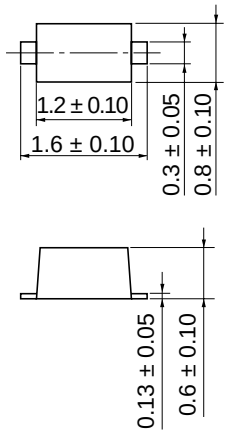


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit: mm



Hitachi Code	UFP
JEDEC	—
EIAJ	Conforms
Mass	0.0016 g

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