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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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HVC131

Silicon Epitaxial Planar Pin Diode for Antenna Switching

REJ03G0420-0300
(Previous: ADE-208-422B)
Rev.3.00
Oct 29, 2004

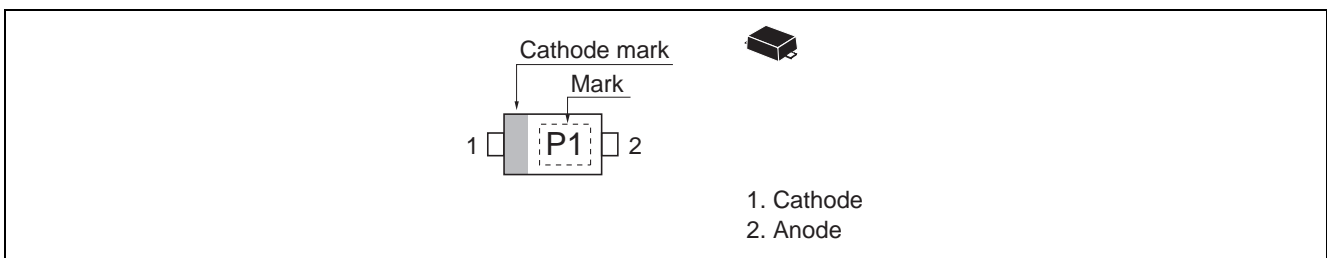
Features

- Low capacitance. ($C = 0.8 \text{ pF max}$)
- Low forward resistance. ($r_f = 1.0 \Omega \text{ max}$)
- 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	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 current	I_R	—	—	0.1	μ A	$V_R = 60$ V
Forward voltage	V_F	—	—	1.0	V	$I_F = 10$ mA
Capacitance	C	—	—	0.8	pF	$V_R = 1$ V, $f = 1$ MHz
Forward resistance	r_f	—	—	1.0	Ω	$I_F = 10$ mA, $f = 100$ MHz

Main Characteristic

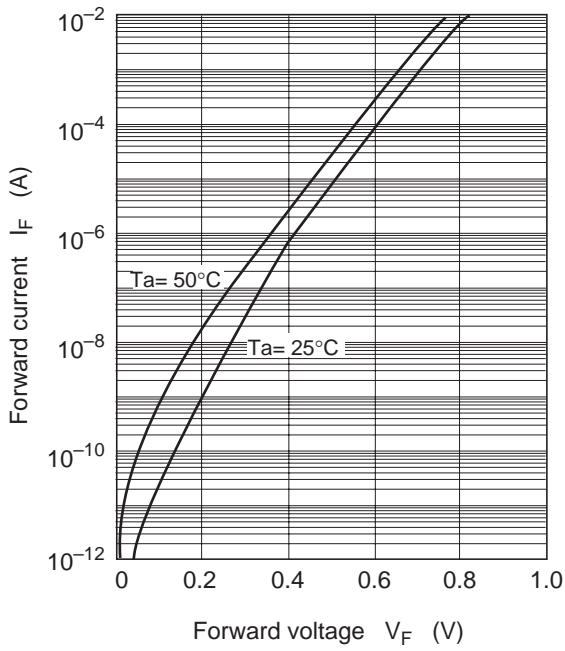


Fig.1 Forward current vs. Forward voltage

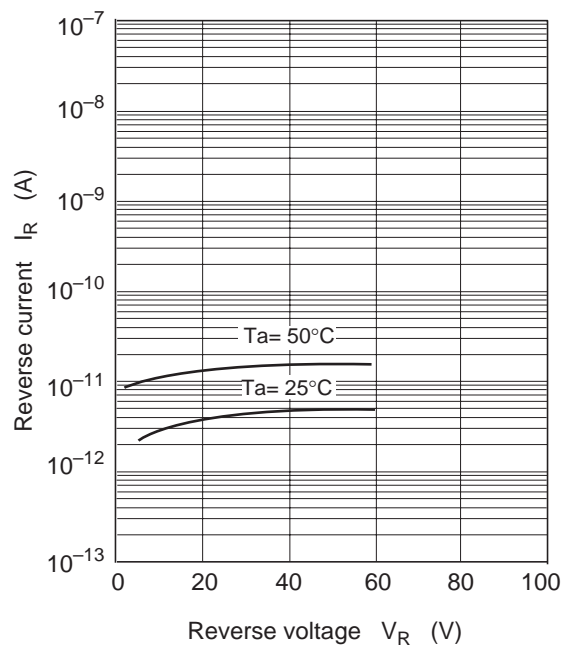


Fig.2 Reverse current vs. Reverse voltage

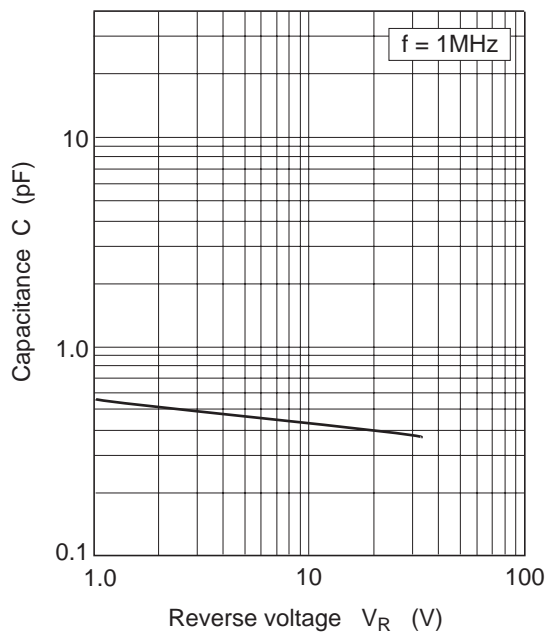


Fig.3 Capacitance vs. Reverse voltage

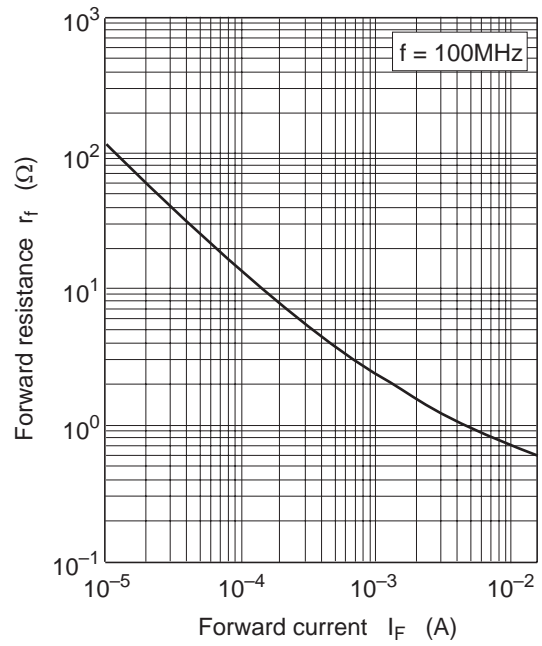
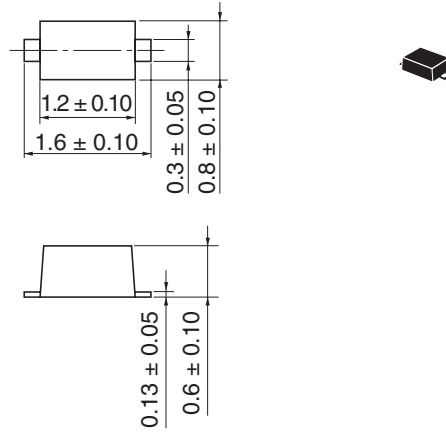


Fig.4 Forward resistance vs. Forward current

Package Dimensions

As of January, 2003
Unit: mm

Package Code	UFP
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.0016 g

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