

To all our customers

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

Cautions

Keep safety first in your circuit designs!

1. Renesas Technology Corporation puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage.

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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HVB187YP

Silicon Epitaxial Planar Pin Diode for High Frequency Attenuator



ADE-208-1411 (Z)

Rev.0
Jun. 2001

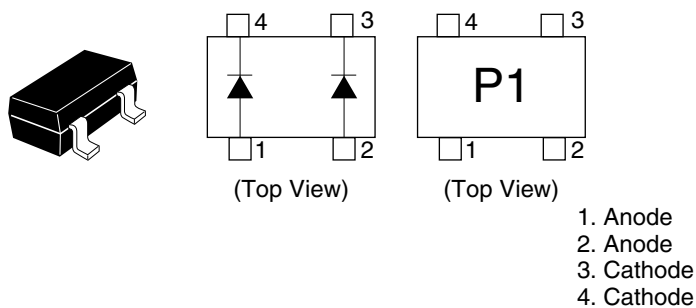
Features

- Low series resistance. ($r_f = 5.5$ max)
- CMPAK-4 package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HVB187YP	P1	CMPAK-4

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	60	V
Forward current	I_F	50	mA
Power dissipation	P_d *1	100	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Note: 1. Per one device.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I_R	—	—	100	nA	$V_R = 60$ V
Forward voltage	V_F	—	—	1.0	V	$I_F = 10$ mA
Capacitance	C	—	—	2.4	pF	$V_R = 0$ V, $f = 1$ MHz
Forward resistance	r_f	3.5	—	5.5	Ω	$I_F = 10$ mA, $f = 100$ MHz
ESD-Capability *1	•	200	•	•	V	C= 200 pF, R= 0 Ω , Both forward and reverse direction 1 pulse.

Note: 1. Failure criterion ; $I_R \geq 100$ nA at $V_R = 60$ V.

Main Characteristic

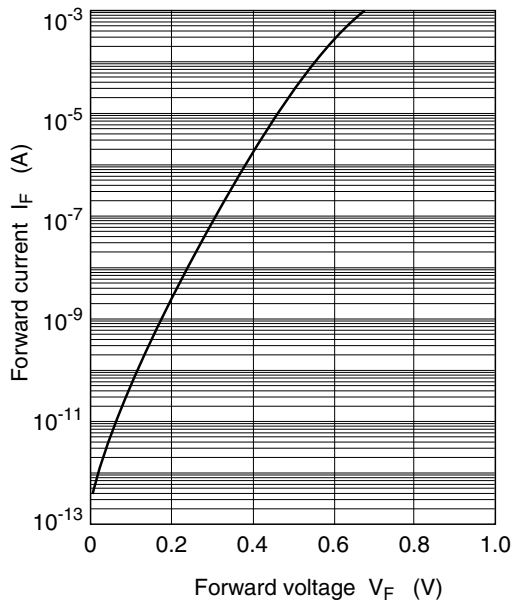


Fig.1 Forward current vs. Forward voltage

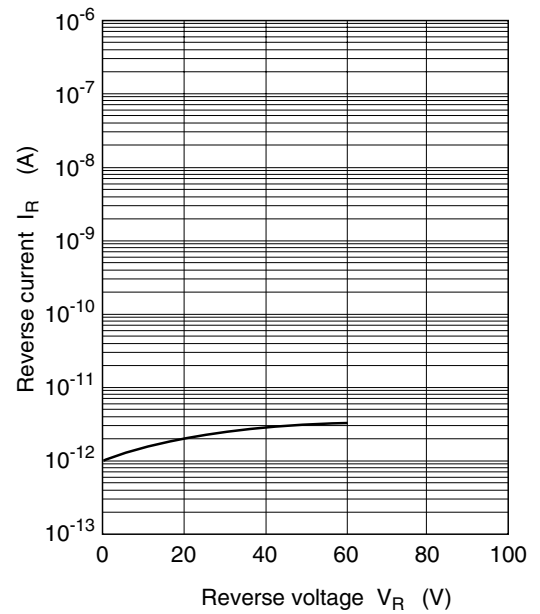


Fig.2 Reverse current vs. Reverse voltage

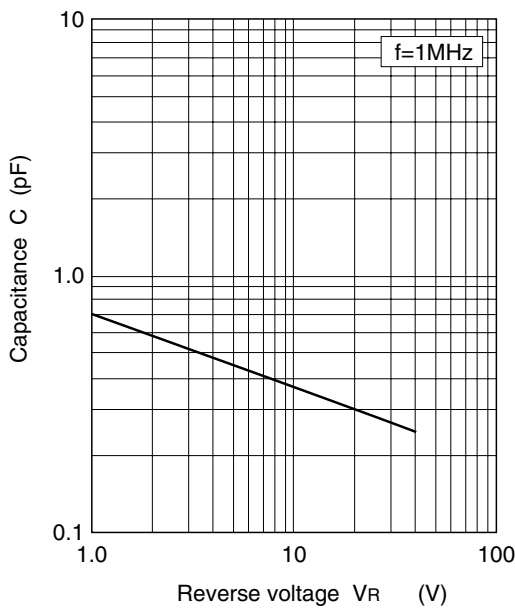


Fig.3 Capacitance vs. Reverse voltage

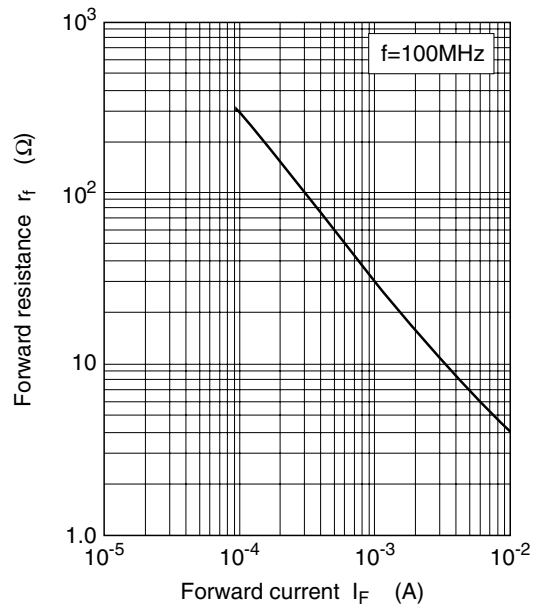
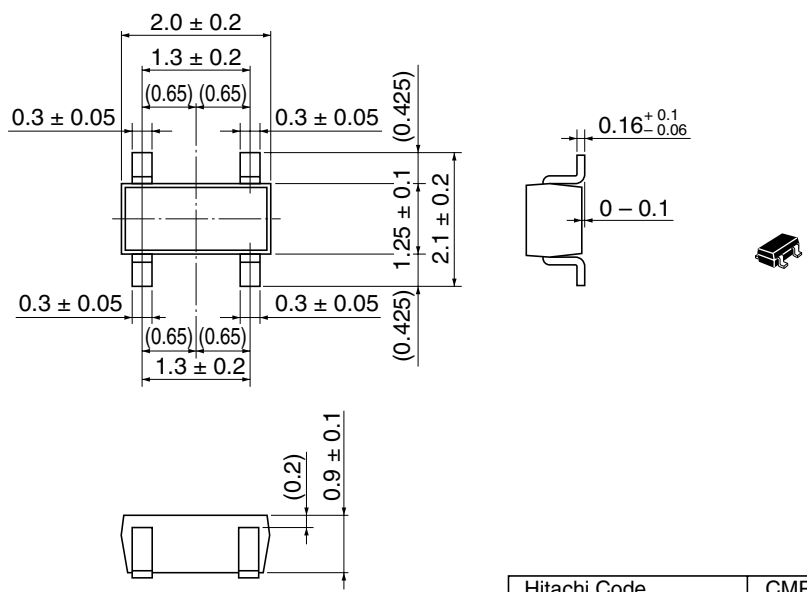


Fig.4 Forward resistance vs. Forward current

Package Dimensions

As of January, 2001
Unit: mm



Hitachi Code	CMPAK-4
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.006 g

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