

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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# HSB0104YP

Silicon Schottky Barrier Diode for High Speed Switching



ADE-208-730A (Z)

Rev. 1  
Sep. 2000

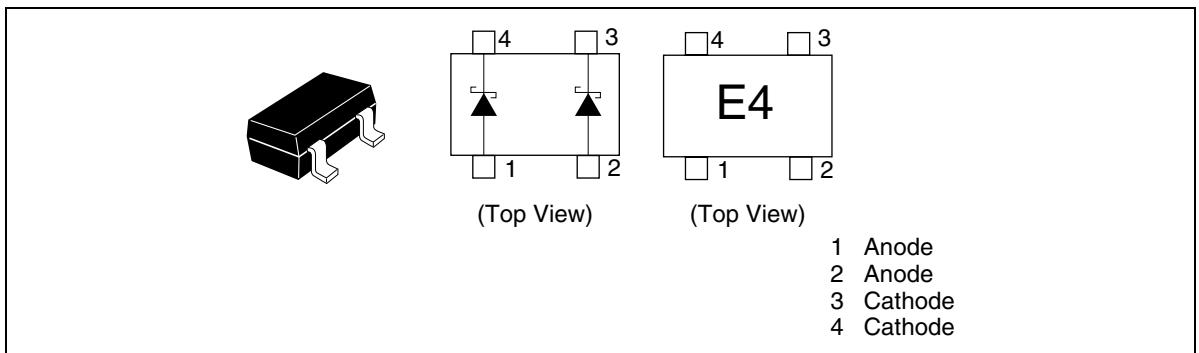
## Features

- Can be used for protection of signal-bus lines.
- The mounting efficiency has been improved by incorporating two low-loss diode element into a CMPAK-4 package.

## Ordering Information

Type No.	Laser Mark	Package Code
HSB0104YP	E4	CMPAK-4

## Pin Arrangement



## Absolute Maximum Ratings <sup>\*1</sup>

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse peak reverse voltage	V <sub>RRM</sub>	40	V
Forward current	I <sub>F</sub>	100	mA
Non-Repetitive peak forward surge current	I <sub>FSM</sub> <sup>*2</sup>	3	A
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C

Notes: 1. Per one device.  
2. 10ms sine wave 1 pulse.

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V <sub>F</sub>	—	—	0.58	V	I <sub>F</sub> = 100 mA
Reverse current	I <sub>R</sub>	—	—	50	μA	V <sub>R</sub> = 40 V
Capacitance	C	—	20	—	pF	V <sub>R</sub> = 0 V, f = 1 MHz

Main Characteristic

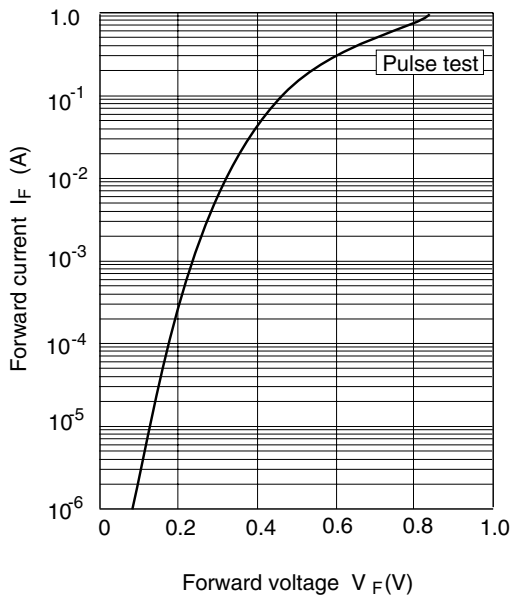


Fig.1 Forward current Vs. Forward voltage

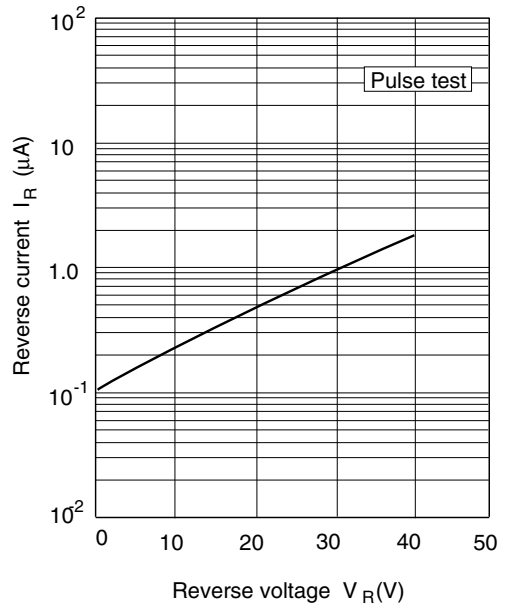


Fig.2 Reverse current Vs. Reverse voltage

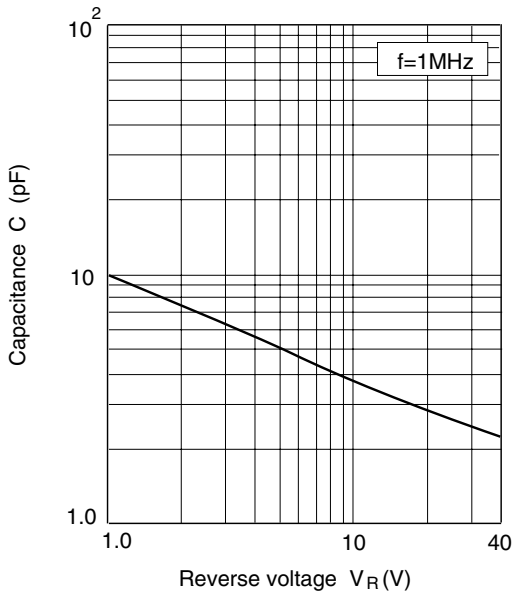
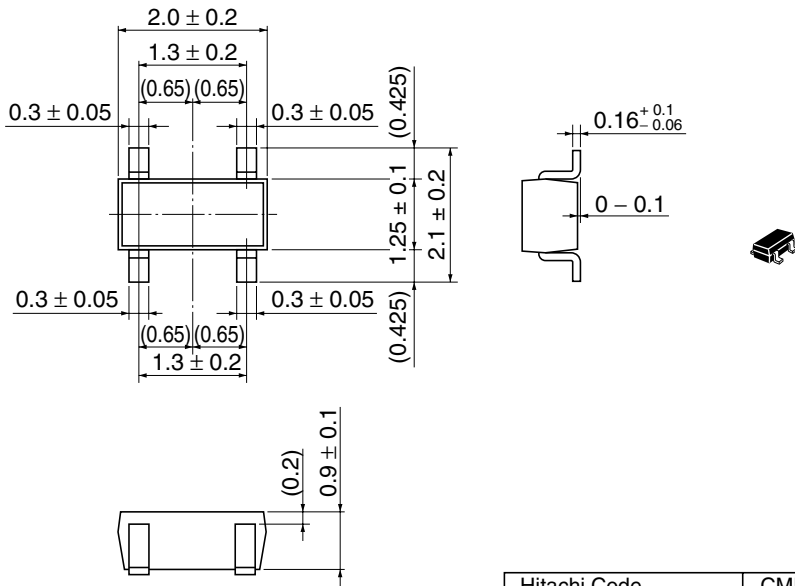


Fig.3 Capacitance Vs. Reverse voltage

## Package Dimensions

Unit: mm



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

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