

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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# HSB88WK

Silicon Schottky Barrier Diode for High Speed Switching

**RENESAS**

ADE-208-1042 (Z)

Rev. 0  
Jan. 2001

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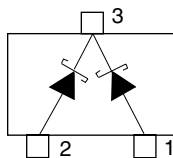
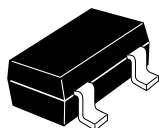
## Features

- Proof against high voltage.
- CMPAK package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HSB88WK	C4	CMPAK

## Pin Arrangement



(Top View)

1. Anode
2. Anode
3. Cathode

## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	10	V
Average rectified current	$I_O^{*1}$	15	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Note: Per one device.

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	350	—	420	mV	$I_F = 1 \text{ mA}$
	$V_{F2}$	500	—	580		$I_F = 10 \text{ mA}$
Reverse current	$I_{R1}$	—	—	0.2	$\mu\text{A}$	$V_R = 2 \text{ V}$
	$I_{R2}$	—	—	10		$V_R = 10 \text{ V}$
Capacitance	C	—	—	0.80	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Capacitance deviation	$\Delta C$	—	—	0.10	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Forward voltage deviation	$\Delta V_F$	—	—	10	mV	$I_F = 10 \text{ mA}$
ESD-Capability <sup>*1</sup>	—	30	—	—	V	C = 200 pF, R = 0 $\Omega$ , Both forward and reverse direction 1 pulse.

Note: Failure criterion ; IR > 0.4 $\mu\text{A}$  at VR = 2 V

Main Characteristic

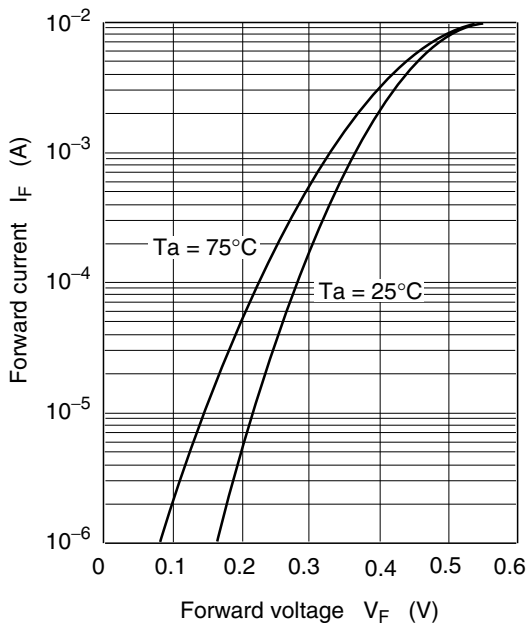


Fig.1 Forward current Vs. Forward voltage

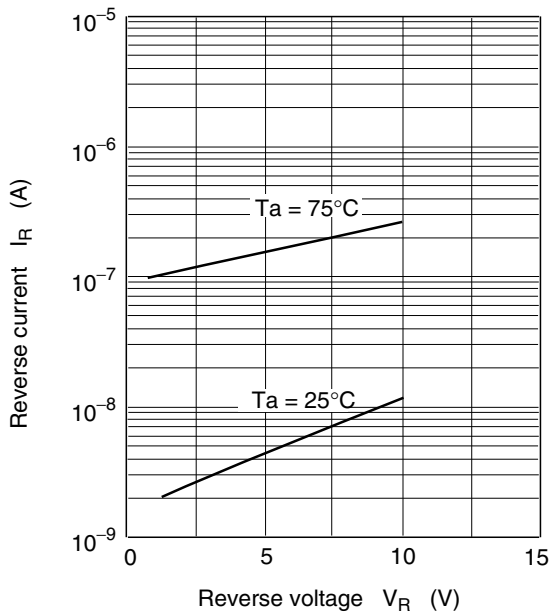


Fig.2 Reverse current Vs. Reverse voltage

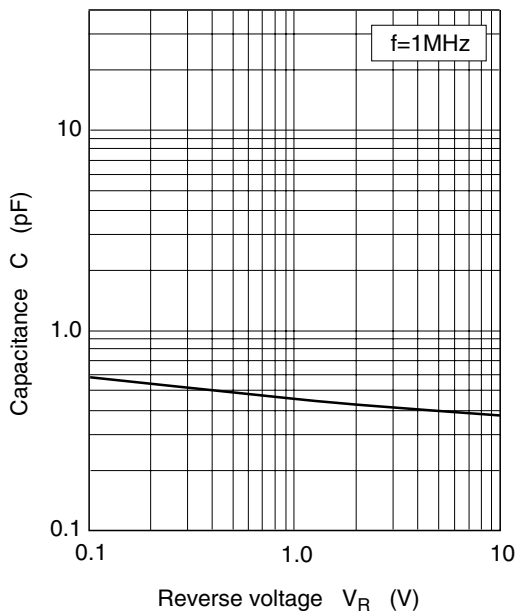


Fig.3 Capacitance Vs. Reverse voltage



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