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# HSB88AS

Silicon Schottky Barrier Diode for High Speed Switching

# HITACHI

ADE-208-964 (Z)

Rev. 0  
Aug. 2000

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## Features

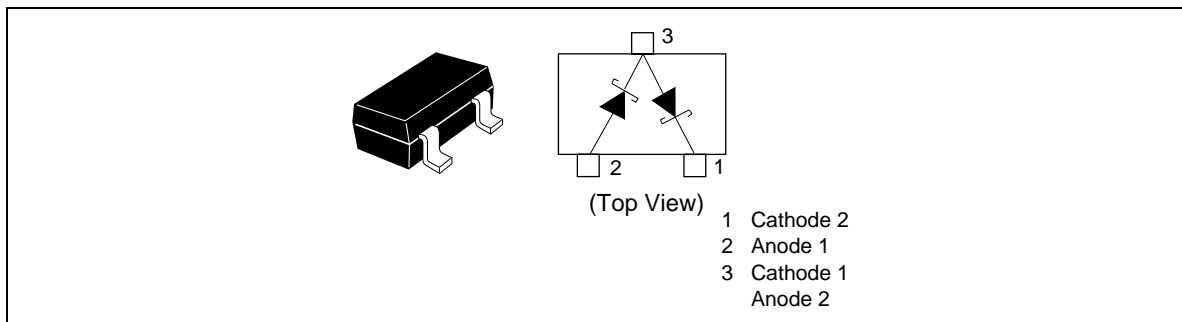
- Low reverse current, Low capacitance.
- CMPAK package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HSB88AS	C1	CMPAK

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## Pin Arrangement



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## HSB88AS

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### Absolute Maximum Ratings

(Ta = 25°C)

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

Note: Per one device.

### Electrical Characteristics \*<sup>1</sup>

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	0.350	—	0.420	V	$I_F = 1 \text{ mA}$
	$V_{F2}$	0.500	—	0.580		$I_F = 10 \text{ mA}$
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 MHz
Capacitance deviation	$\Delta C$	—	—	0.10	pF	$V_R = 0 \text{ V}$ , f = 1 MHz
Forward voltage deviation	$\Delta V_F$	—	—	10	mV	$I_F = 10 \text{ mA}$
ESD-Capability <sup>*2</sup>	—	30	—	—	V	C = 200 pF, R = 0 $\Omega$ , Both forward and reverse direction 1 pulse.

Notes: 1. Per one device.

2. Failure criterion ;  $I_R > 0.4 \mu\text{A}$  at  $V_R = 2\text{V}$

Main Characteristic

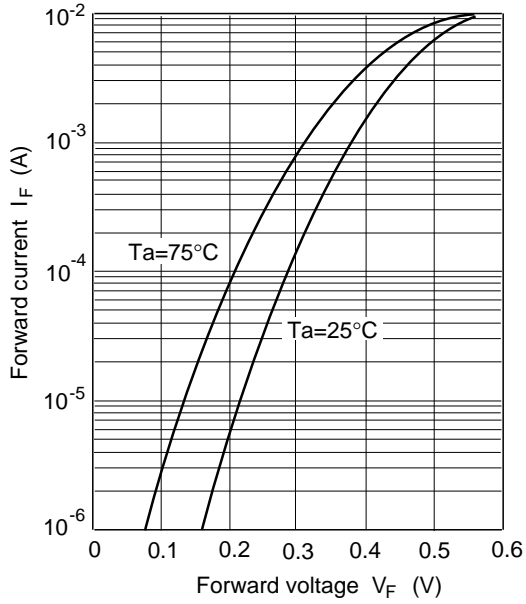


Fig.1 Forward current Vs. Forward voltage

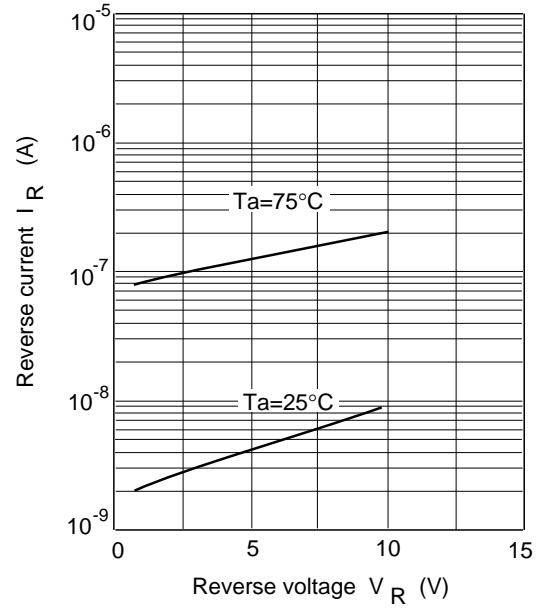


Fig.2 Reverse current Vs. Reverse voltage

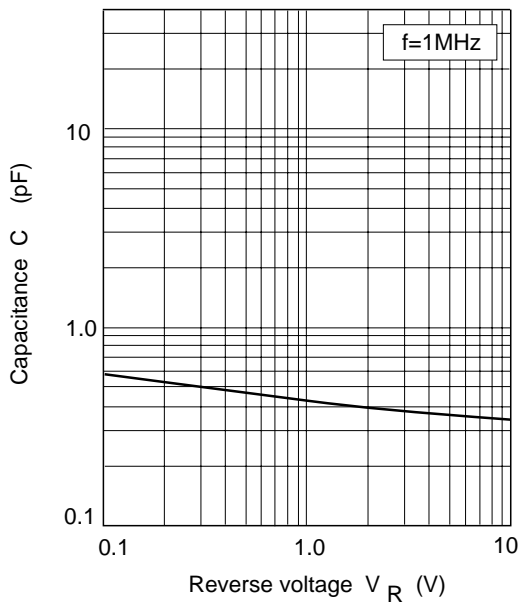
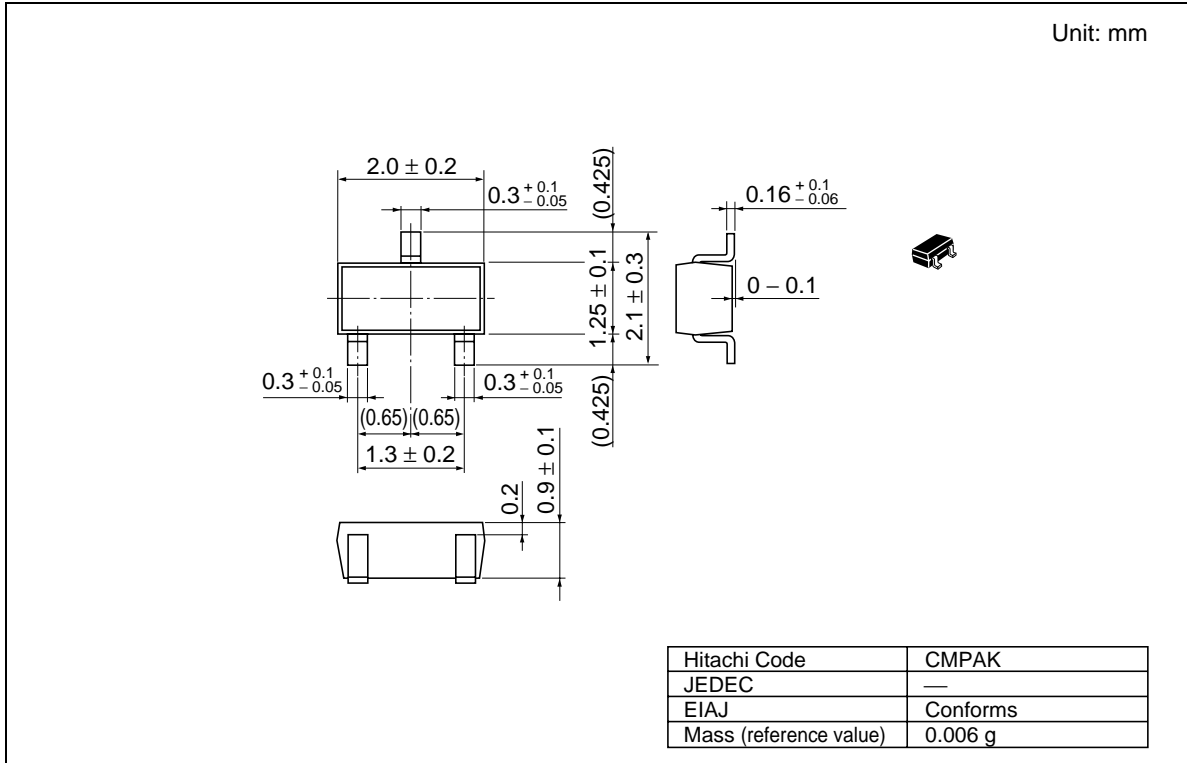


Fig.3 Capacitance Vs. Reverse voltage

# HSB88AS

## Package Dimensions



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