
HSB88AS

Silicon Schottky Barrier Diode for High Speed Switching

HITACHI

ADE-208-964 (Z)

Rev. 0
Aug. 2000

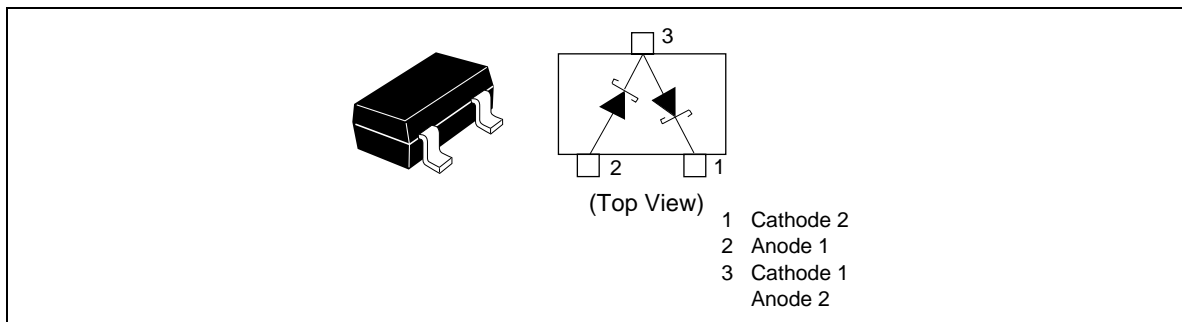
Features

- 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

Pin Arrangement



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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 *¹

(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	μA	$V_R = 2 \text{ V}$
	I_{R2}	—	—	10		$V_R = 10 \text{ V}$
Capacitance	C	—	—	0.80	pF	$V_R = 0 \text{ V}$, f = 1 MHz
Capacitance deviation	ΔC	—	—	0.10	pF	$V_R = 0 \text{ V}$, f = 1 MHz
Forward voltage deviation	ΔV _F	—	—	10	mV	$I_F = 10 \text{ mA}$
ESD-Capability ^{*2}	—	30	—	—	V	C = 200 pF, R = 0 Ω, Both forward and reverse direction 1 pulse.

Notes: 1. Per one device.

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

Main Characteristic

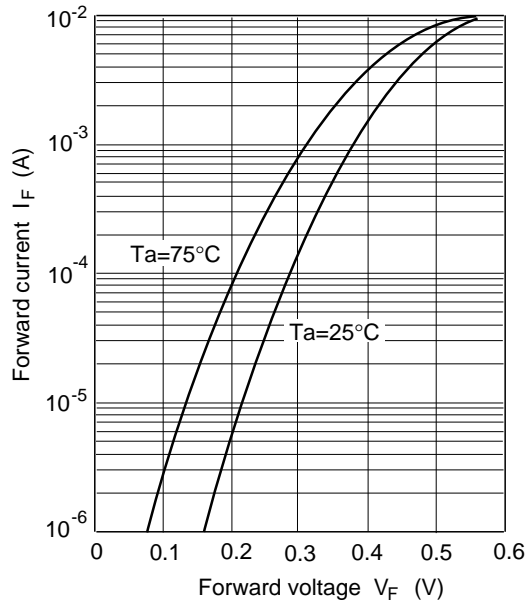


Fig.1 Forward current Vs. Forward voltage

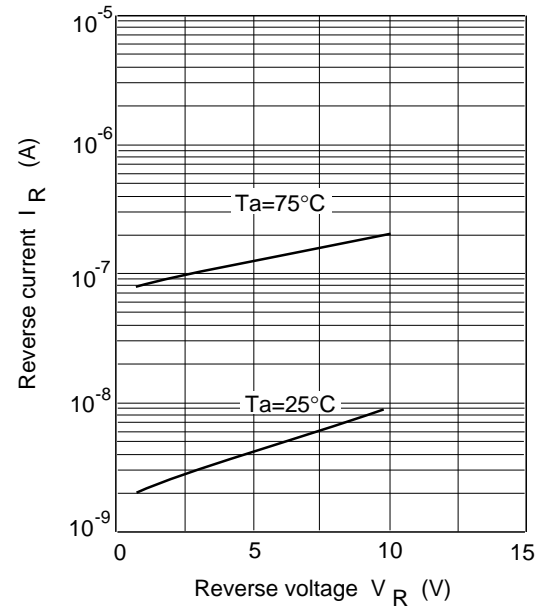


Fig.2 Reverse current Vs. Reverse voltage

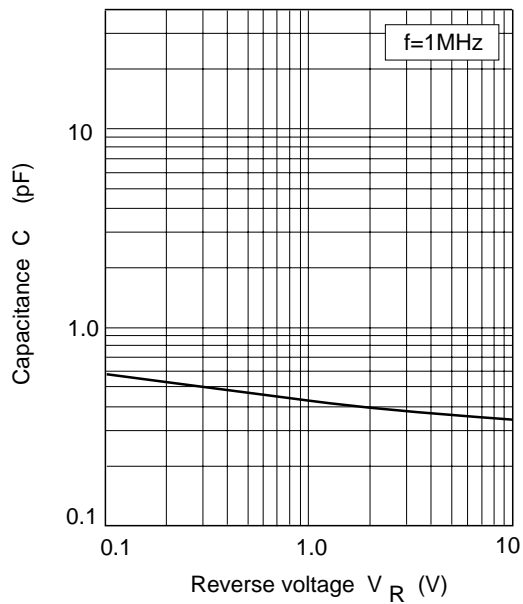
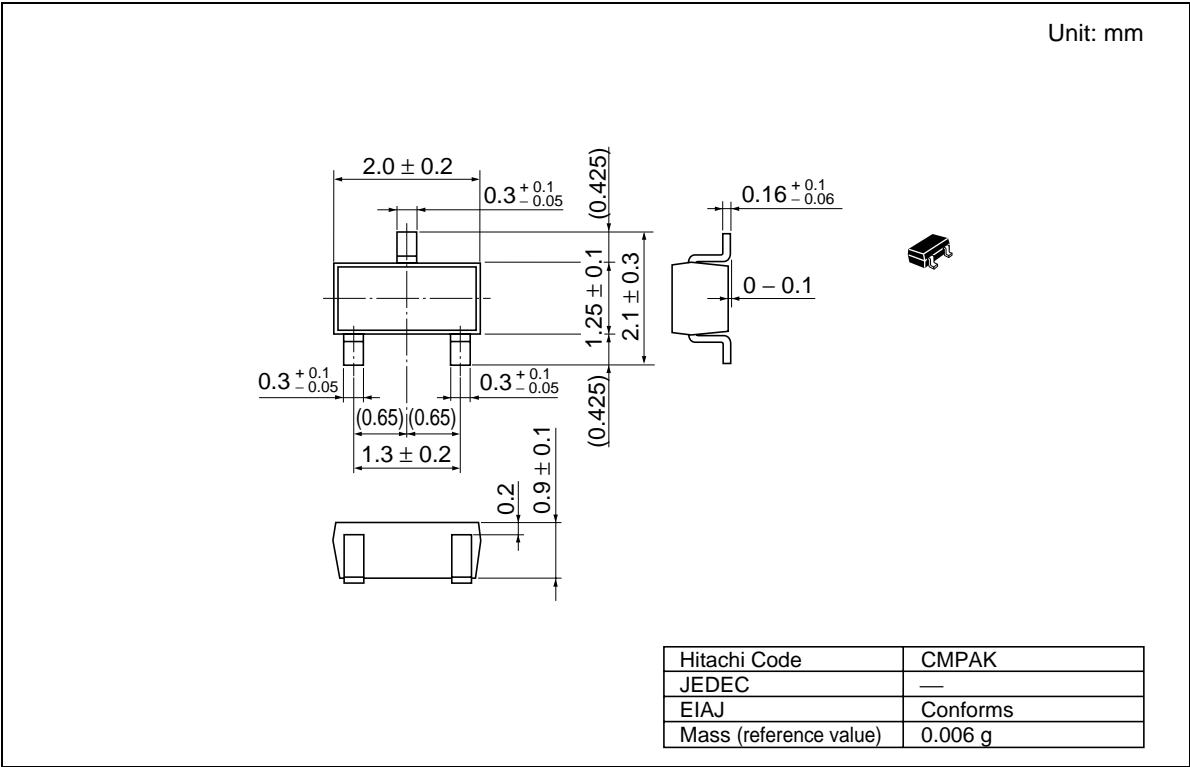


Fig.3 Capacitance Vs. Reverse voltage

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Package Dimensions



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