HSB88AS

Silicon Schottky Barrier Diode for High Speed Switching

REJ03G0586-0100
(Previous: ADE-208-964)
Rev.1.00
Mar 31, 2005

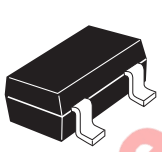
Features

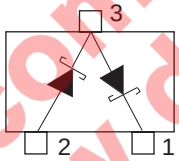
- Low reverse current, Low capacitance.
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HSB88AS	C1	CMPAK	PTSP0003ZB-A (CMPAK)

Pin Arrangement





(Top View)

1. Cathode 2
2. Anode 1
3. Cathode 1
   Anode 2

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: 1. 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 mA
	V_{F2}	0.500	—	0.580		I_F = 10 mA
Reverse current	I_{R1}	—	—	0.2	μA	V_R = 2 V
	I_{R2}	—	—	10		V_R = 10 V
Capacitance	C	—	—	0.80	pF	V_R = 0 V, f = 1 MHz
Capacitance deviation	ΔC	—	—	0.10	pF	V_R = 0 V, f = 1 MHz
Forward voltage deviation	ΔV_F	—	—	10	mV	I_F = 10 mA
ESD-Capabilityme *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 μA at V_R = 2V

Main Characteristic

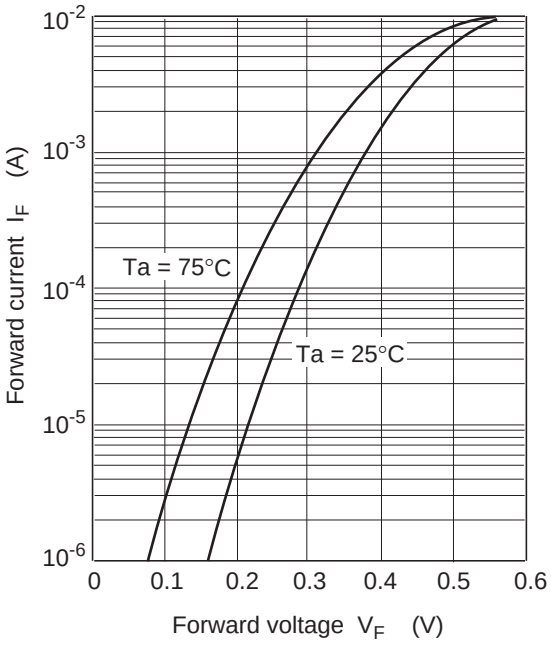


Fig.1 Forward current vs. Forward voltage

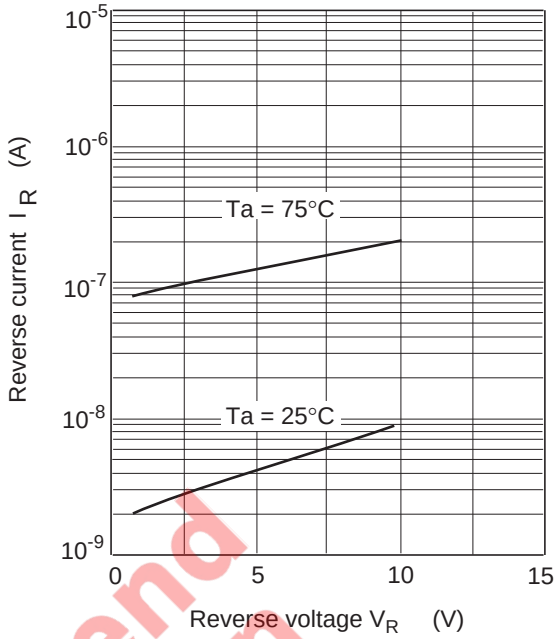


Fig.2 Reverse current vs. Reverse voltage

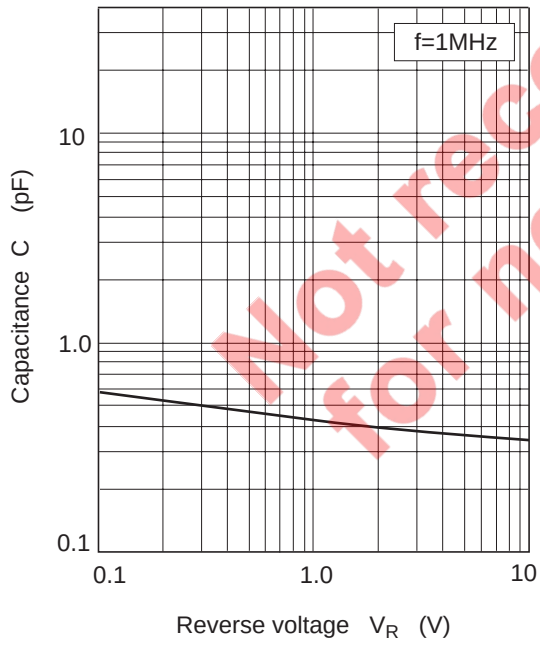
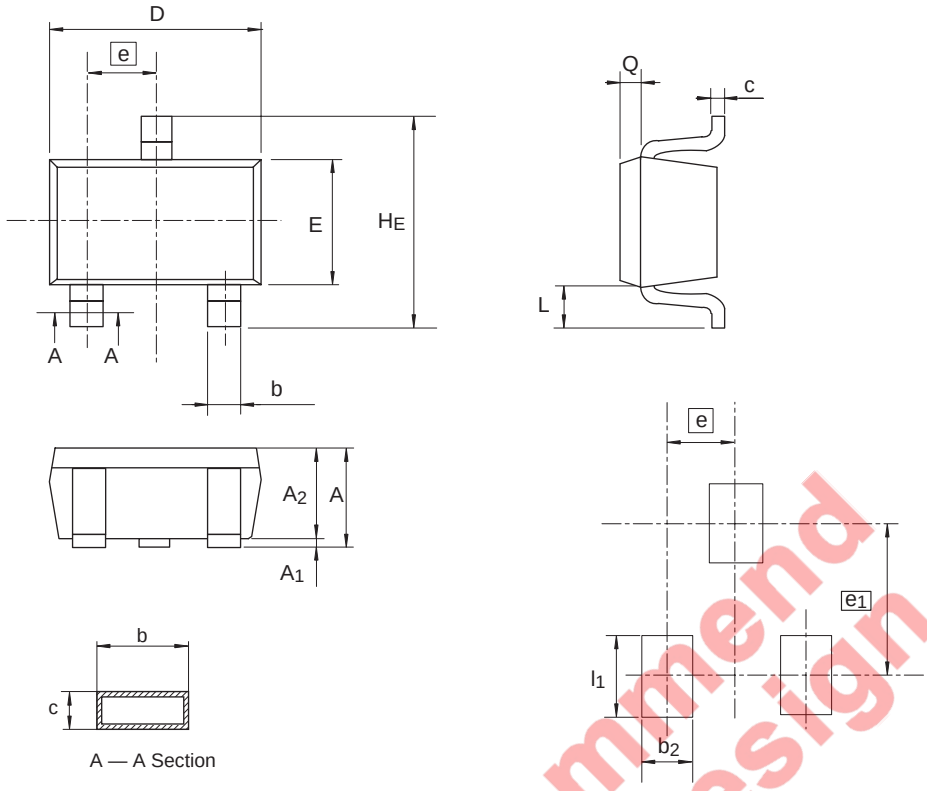


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
SC-70	PTSP0003ZB-A	CMPAK / CMPAKV	0.006g



Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.8	-	1.1
A_1	0	-	0.1
A_2	0.8	0.9	1.0
b	0.25	0.3	0.4
c	0.1	0.16	0.26
D	1.8	2.0	2.2
E	1.15	1.25	1.35
e	-	0.65	-
H_E	1.8	2.1	2.4
L	-	0.425	-
b_2	-	-	0.45
e_1	-	1.5	-
l_1	-	-	0.9
Q	-	0.2	-

Renesas Technology Corp. Sales Strategic Planning Div. Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

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Renesas Technology America, Inc.
450 Holger Way, San Jose, CA 95134-1368, U.S.A
Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

Renesas Technology Europe Limited
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
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7th Floor, North Tower, World Finance Centre, Harbour City, 1 Canton Road, Tsimshatsui, Kowloon, Hong Kong
Tel: <852> 2265-6688, Fax: <852> 2730-6071

Renesas Technology Taiwan Co., Ltd.
10th Floor, No.99, Fushing North Road, Taipei, Taiwan
Tel: <886> (2) 2715-2888, Fax: <886> (2) 2713-2999

Renesas Technology (Shanghai) Co., Ltd.
Unit2607 Ruijing Building, No.205 Maoming Road (S), Shanghai 200020, China
Tel: <86> (21) 6472-1001, Fax: <86> (21) 6415-2952

Renesas Technology Singapore Pte. Ltd.
1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632
Tel: <65> 6213-0200, Fax: <65> 6278-8001

Colophon 2.0

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Renesas Electronics website: http://www.renesas.com

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

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