To our customers,

Old Company Name in Catalogs and Other Documents

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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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HZB6.8MWA

Silicon Planar Zener Diode for Surge Absorb

REJ03G1256-0200
(Previous: ADE-208-971A)
Rev.2.00
Sep 13, 2005

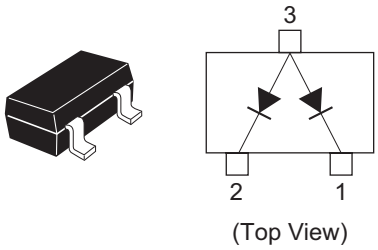
Features

- HZB6.8MWA has two devices in a monolithic, and can absorb surge.
- 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)
HZB6.8MWA	68M	CMPAK	PTSP0003ZB-A (CMPAK)

Pin Arrangement



(Top View)

1. Cathode
2. Cathode
3. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd *	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	−55 to +150	°C

Note: Two device total, See Fig.2.

Electrical Characteristics *[1]

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V_Z	6.47	—	7.0	V	I_Z = 5 mA, 40 ms pulse
Reverse current	I_R	—	—	2	μA	V_R = 3.5 V
Capacitance	C	—	—	130	pF	V_R = 0 V, f = 1 MHz
Dynamic resistance	r_d	—	—	30	Ω	I_Z = 5 mA
ESD-Capability *[2]	—	30	—	—	kV	C = 150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse

Notes: 1. Per one device
2. Failure criterion ; I_R > 2 μA at V_R = 3.5 V.

Main Characteristic

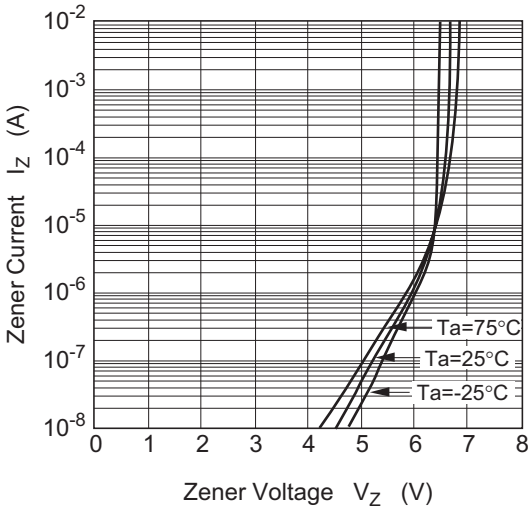


Fig.1 Zener current vs. Zener voltage

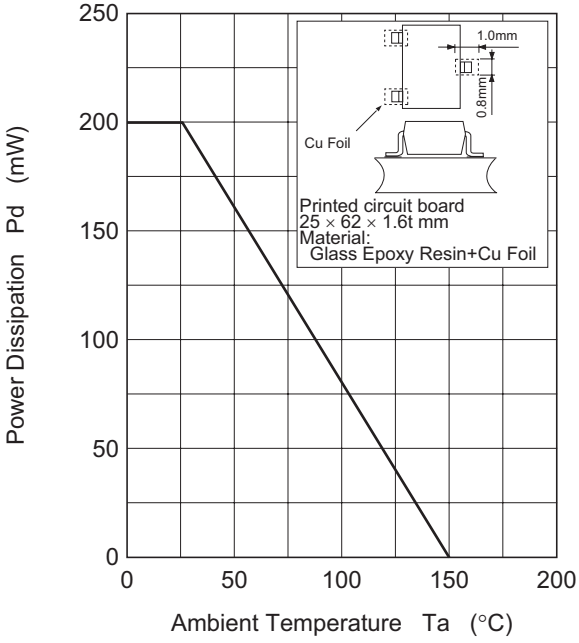
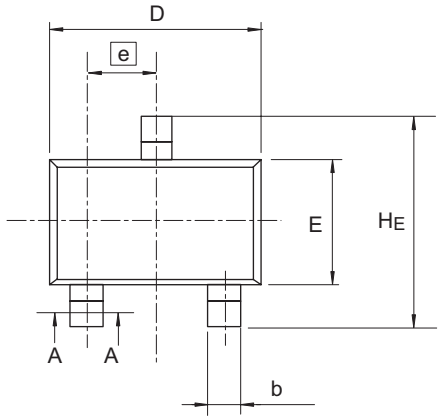
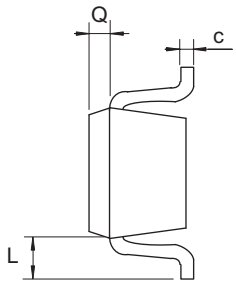


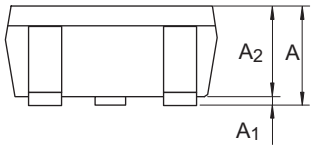
Fig.2 Power Dissipation vs. Ambient Temperature

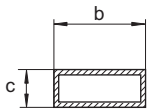
Package Dimensions

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

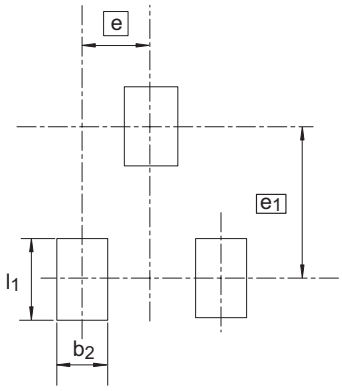








A — A Section



Pattern of terminal position areas

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	-

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