To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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HZM3.3WA

Silicon Epitaxial Planar Zener Diode for Surge Absorb

RENESAS

ADE-208-1458A (Z)

Rev.1
Nov. 2002

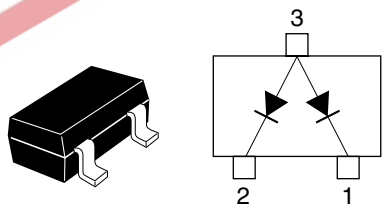
Features

- HZM3.3WA has two devices, and can absorb surge.
- MPAK Package is suitable for high density surface mounting.

Ordering Information

Type No.	Laser Mark	Package Code
HZM3.3WA	33A	MPAK

Pin Arrangement



(Top View)

1. Cathode
2. Cathode
3. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd *[1]	200	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	–55 to +150	°C

Note 1. Two device total, See Fig.2.

Electrical Characteristics *[1]

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V_Z	3.10	—	3.50	V	I_Z = 5 mA, 40 ms pulse
Reverse current	I_R	—	—	20	µA	V_R = 1.0 V
Dynamic resistance	r_d	—	—	130	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 > 20 µA at V_R = 1.0 V.

Main Characteristic

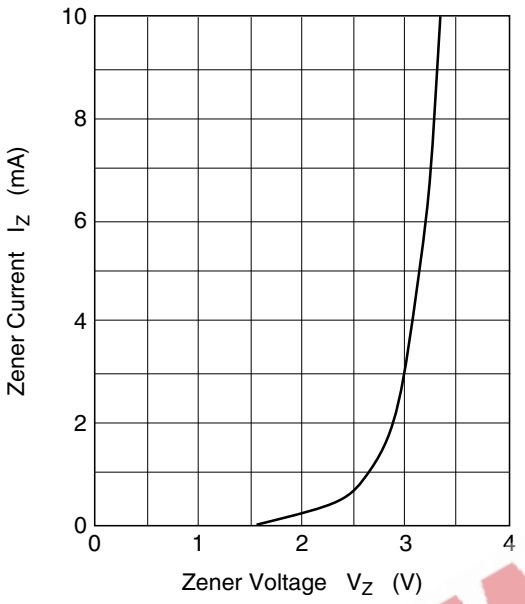


Fig.1 Zener current vs. Zener voltage

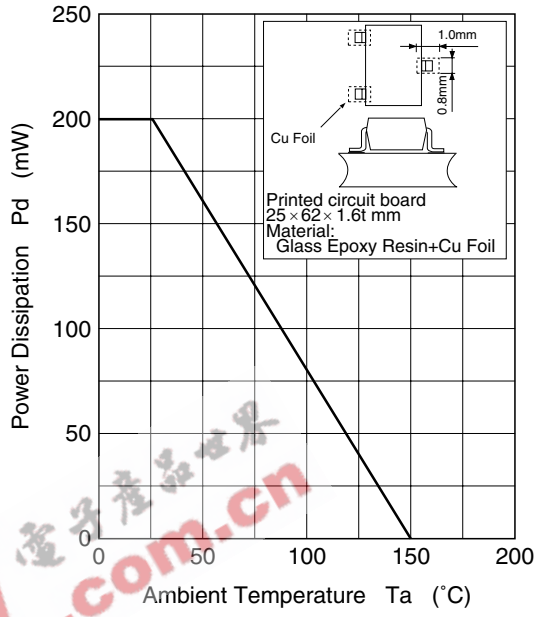


Fig.2 Power Dissipation vs. Ambient Temperature

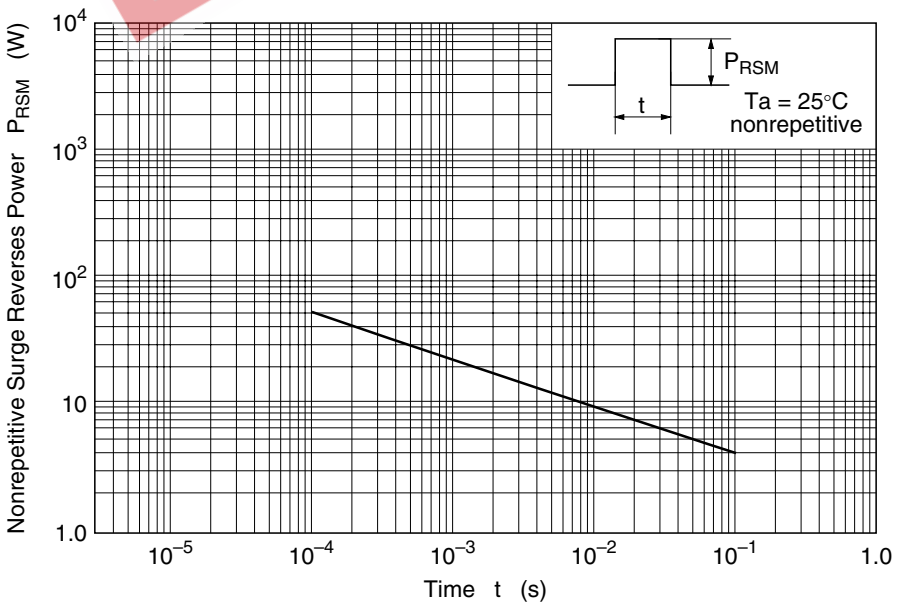


Fig.3 Surge Reverse Power Ratings

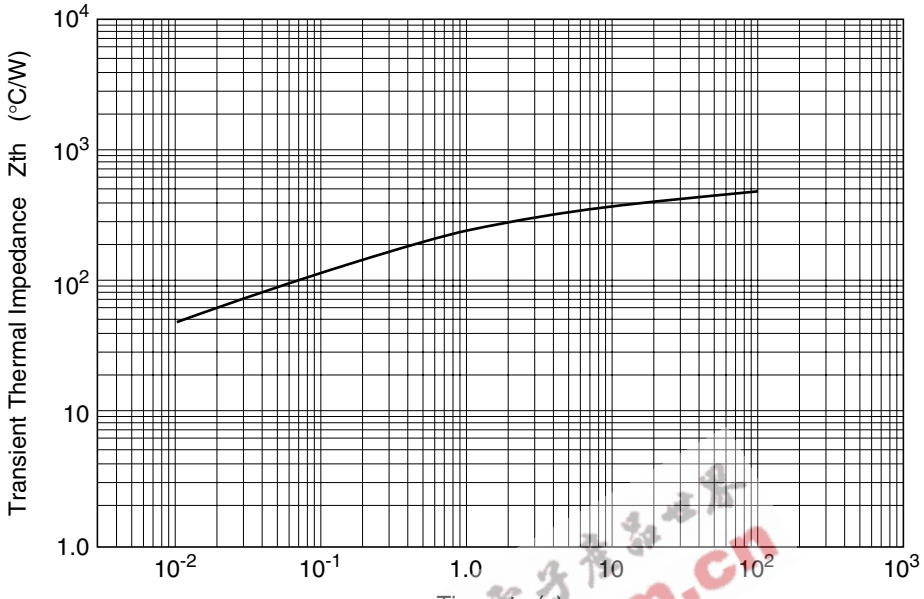
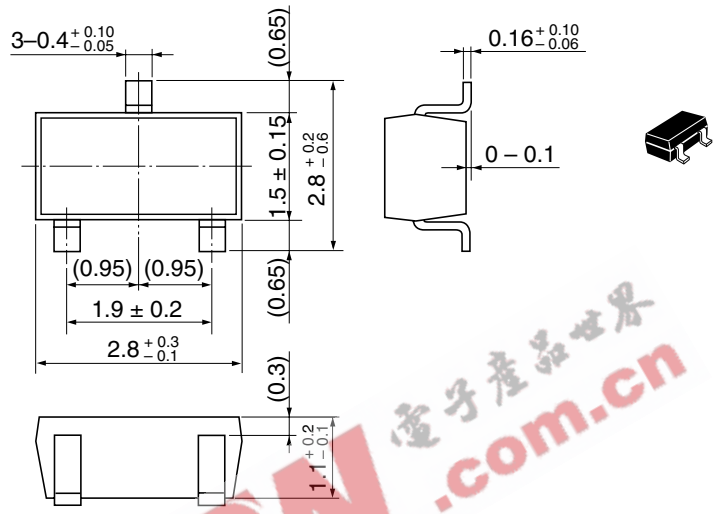


Fig.4 Transient Thermal Impedance

Package Dimensions

As of July, 2002

Unit: mm



Hitachi Code	MPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.011 g

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