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

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Keep safety first in your circuit designs!

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Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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HZM27WA

Silicon Epitaxial Planar Zener Diode for Surge Absorb



ADE-208-352C (Z)

Rev.3
Nov. 2002

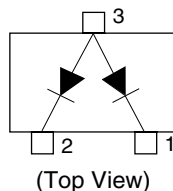
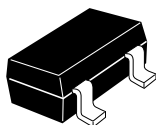
Features

- HZM27WA has two devices, and can absorb surge.
- MPAK Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HZM27WA	<u>2</u> 7A	MPAK

Pin Arrangement



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	25.10	—	28.90	V	I _z = 2 mA, 40 ms pulse
Reverse current	I _R	—	—	2	μA	V _R = 21 V
Capacitance	C	—	(27) * ²	—	pF	V _R = 0 V, f = 1 MHz
Dynamic resistance	r _d	—	—	70	Ω	I _z = 2 mA
ESD-Capability * ³	—	30	—	—	kV	C = 150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse

Notes: 1. Per one device.

2. Reference only.

3. Failure criterion ; I_R > 2 μA at V_R = 21 V.

Main Characteristic

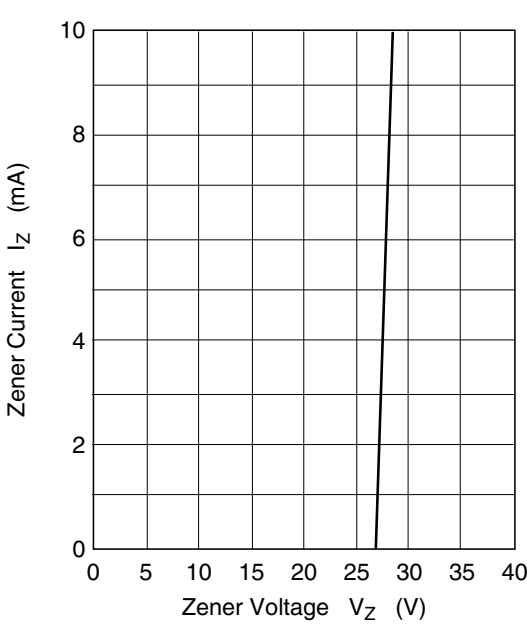


Fig.1 Zener Current vs. Zener Voltage

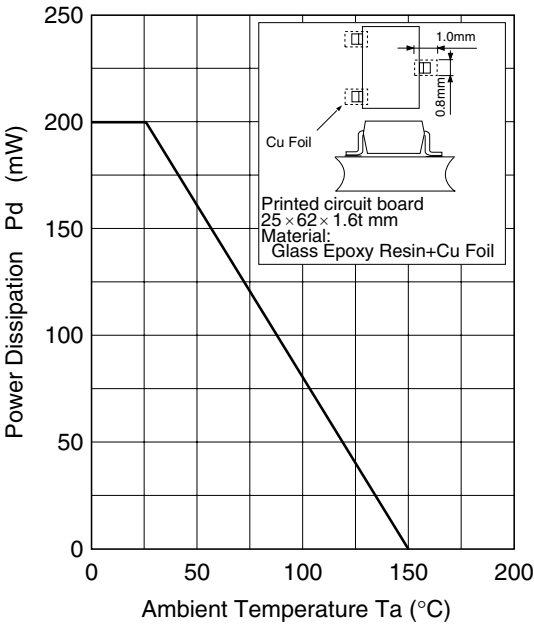


Fig.2 Power Dissipation vs. Ambient Temperature

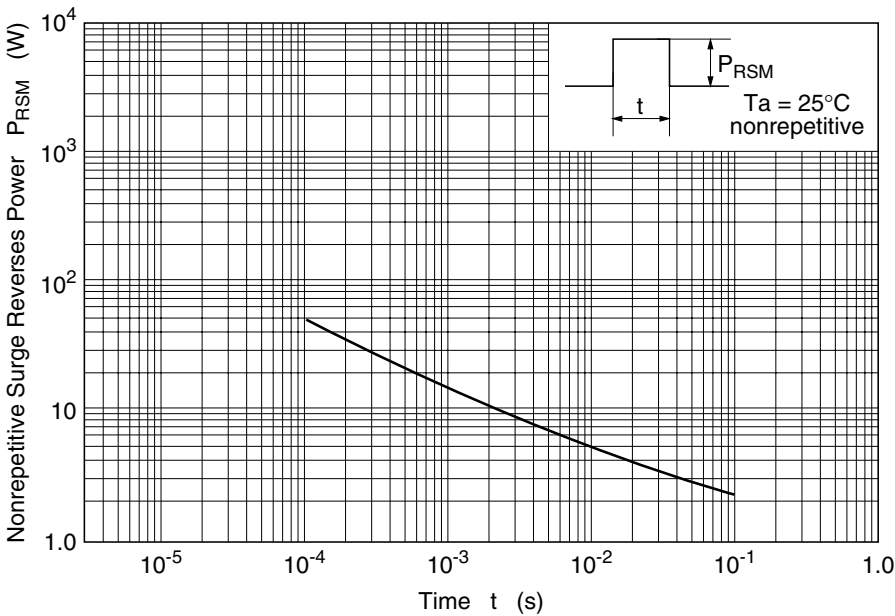


Fig.3 Surge Reverse Power Ratings

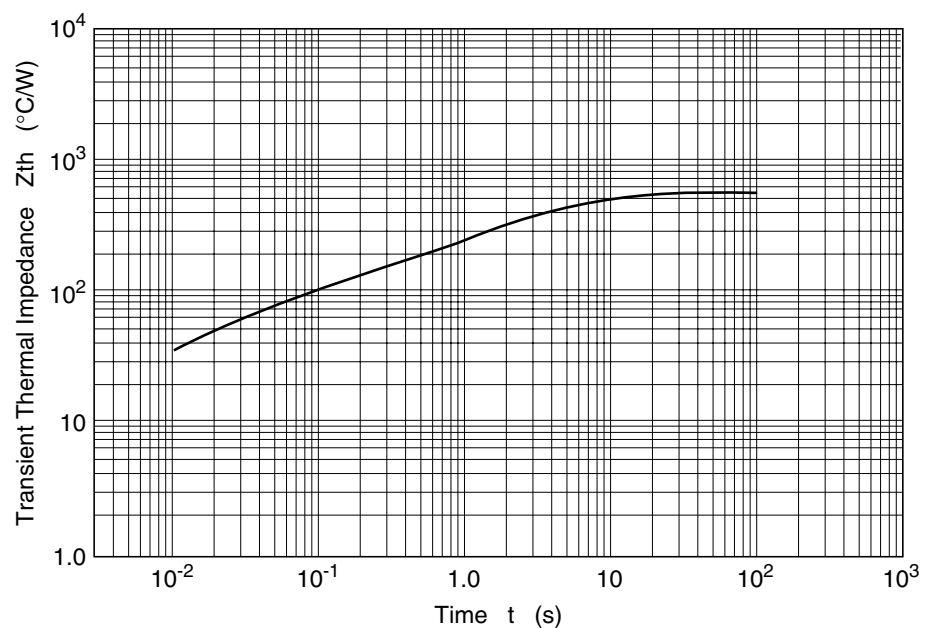
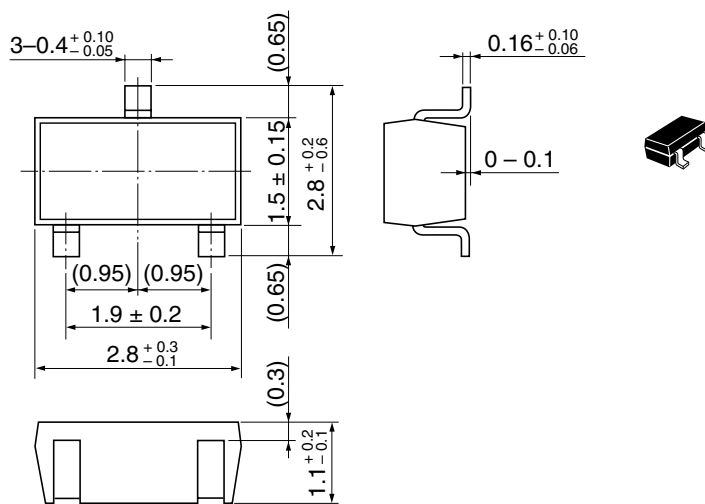


Fig.4 Transient Thermal Impedance

Package Dimensions

As of July, 2002
Unit: mm



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

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