

To all our customers

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

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# HZM6.2ZMFA

Silicon Epitaxial Planar Zener Diode for Surge Absorb



ADE-208-1515 (Z)

Rev.0  
May. 2002

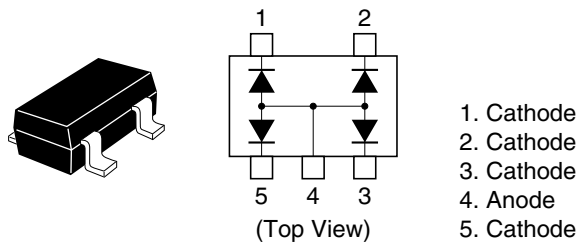
## Features

- HZM6.2ZMFA has four devices in a monolithic, and can absorb surge.
- Low capacitance ( $C = 8.5 \text{ pF max}$ ) and can protect ESD of signal line.
- MPAK-5 Package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HZM6.2ZMFA	62N	MPAK-5

## Pin Arrangement



## 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: Four device total, See Fig.2.

## Electrical Characteristics \*<sup>1</sup>

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V <sub>z</sub>	5.90	—	6.50	V	I <sub>z</sub> = 5 mA, 40 ms pulse
Reverse current	I <sub>R</sub>	—	—	3	μA	V <sub>R</sub> = 5.5 V
Capacitance	C	—	—	8.5	pF	V <sub>R</sub> = 0 V, f = 1 MHz
Dynamic resistance	r <sub>d</sub>	—	—	60	Ω	I <sub>z</sub> = 5 mA
ESD-Capability * <sup>2</sup>	—	13	—	—	kV	C = 150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse

Notes: 1. Per one device.

2. Failure criterion ; I<sub>R</sub> > 3 μA at V<sub>R</sub> = 5.5 V.

Main Characteristics

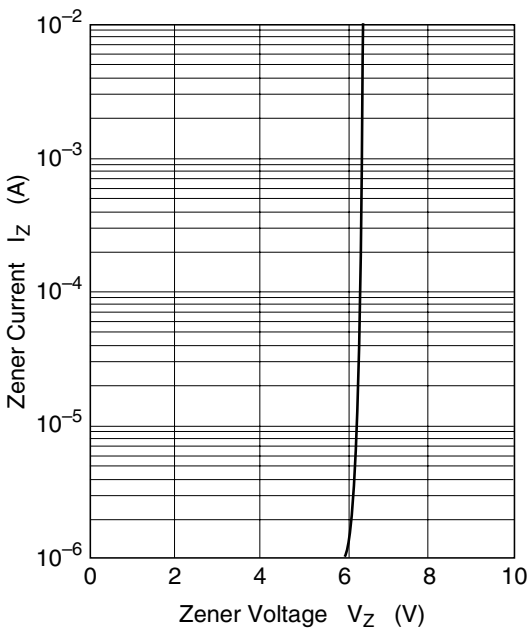


Fig.1 Zener current vs. Zener voltage

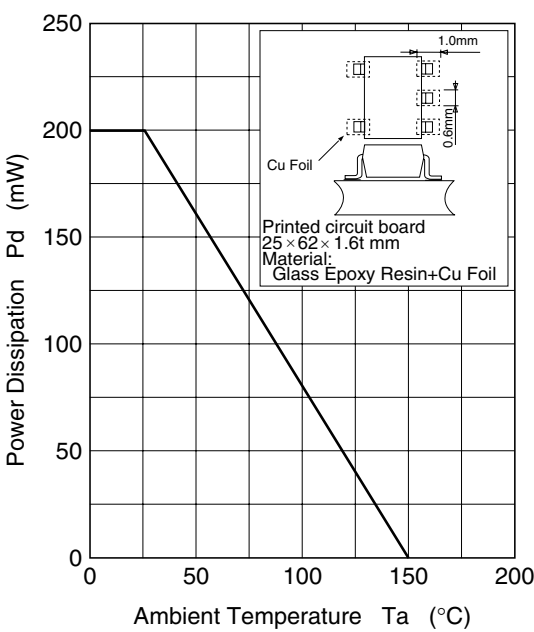


Fig.2 Power Dissipation vs. Ambient Temperature

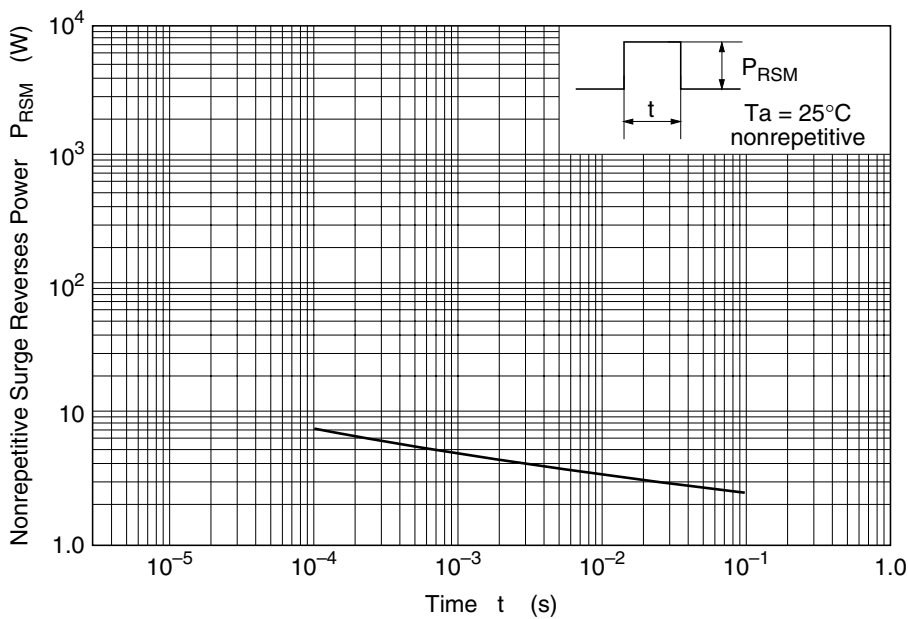


Fig.3 Surge Reverse Power Ratings

**Main Characteristics (cont)**

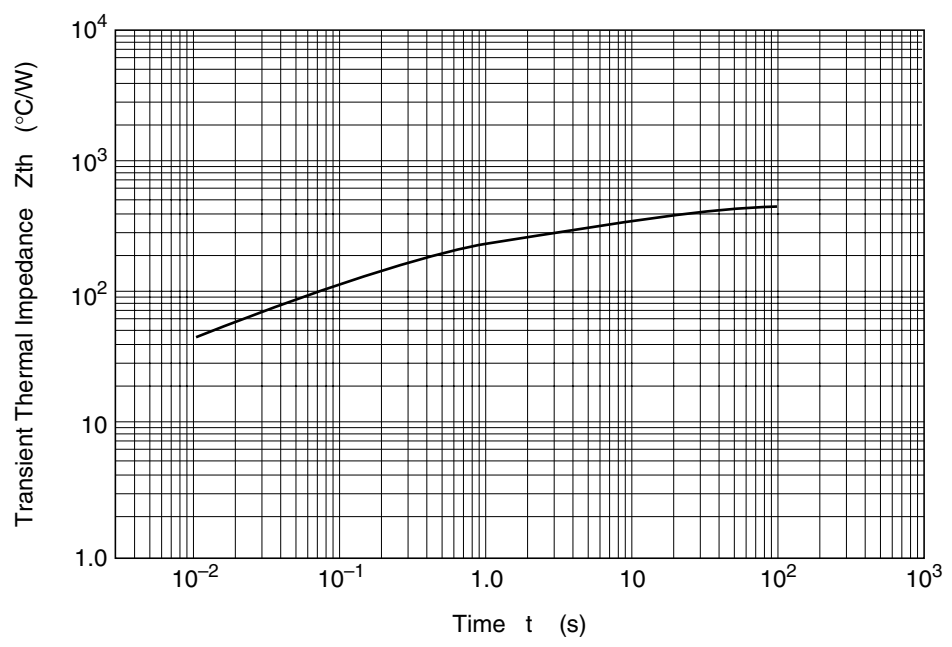


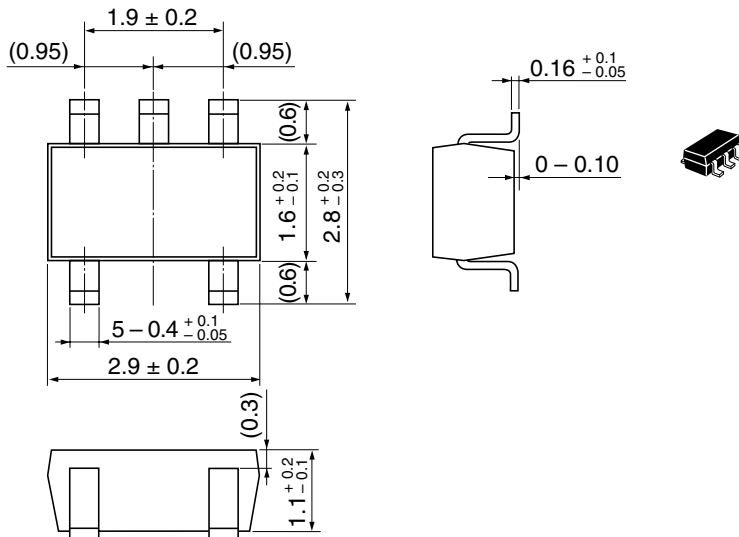
Fig.4 Transient Thermal Impedance \*

Note: Measurement value by forward bias.

# Package Dimensions

As of January, 2002

Unit: mm



Hitachi Code	MPAK-5
JEDEC	—
JEITA	—
Mass (reference value)	0.013 g

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