

# HZM6.2ZFA

Silicon Epitaxial Planar Zener Diode for Surge Absorb

# HITACHI

ADE-208-593A (Z)

Rev.1  
Nov. 2001

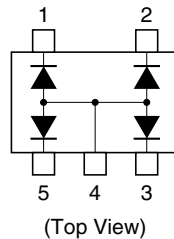
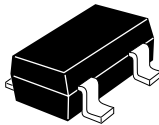
## Features

- HZM6.2ZFA has four devices, and can absorb external + and -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
HZM6.2ZFA	62Z	MPAK-5

## Pin Arrangement



1. Cathode
2. Cathode
3. Cathode
4. Anode
5. Cathode

## Absolute Maximum Ratings

( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Value	Unit
Power dissipation	$P_d$ *	200	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Note: Four device total, See Fig.2.

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

( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	$V_z$	5.90	—	6.50	V	$I_z = 5\text{ mA}$ , 40 ms pulse
Reverse current	$I_R$	—	—	3	$\mu\text{A}$	$V_R = 5.5\text{ V}$
Capacitance	C	—	8.0	8.5	pF	$V_R = 0\text{ V}$ , $f = 1\text{ MHz}$
Dynamic resistance	$r_d$	—	—	60	$\Omega$	$I_z = 5\text{ mA}$
ESD-Capability * <sup>2</sup>	—	13	—	—	kV	C = 150 pF, R = 330 $\Omega$ , Both forward and reverse direction 10 pulse

Notes: 1. Per one device.

2. Failure criterion ;  $I_R > 3\ \mu\text{A}$  at  $V_R = 5.5\text{ V}$ .

Main Characteristic

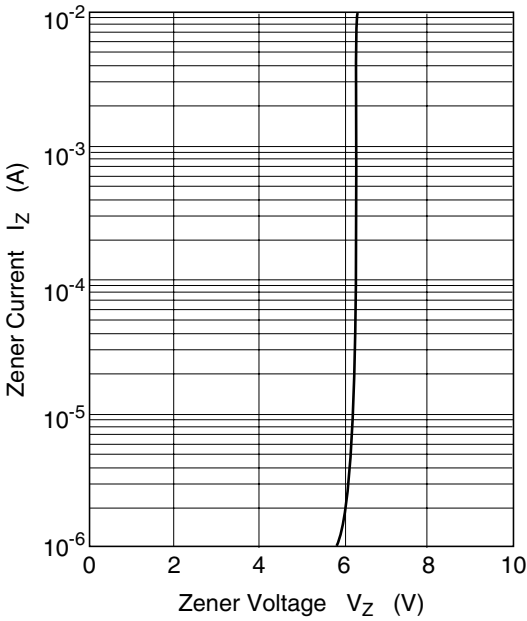


Fig.1 Zener current vs. Zener voltage

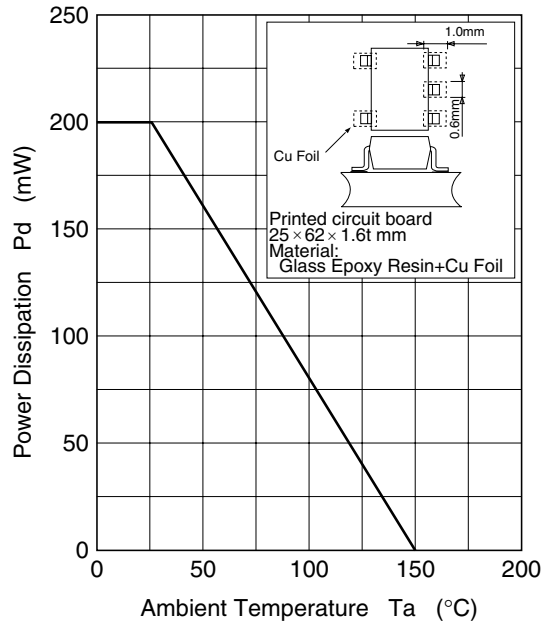


Fig.2 Power Dissipation vs. Ambient Temperature

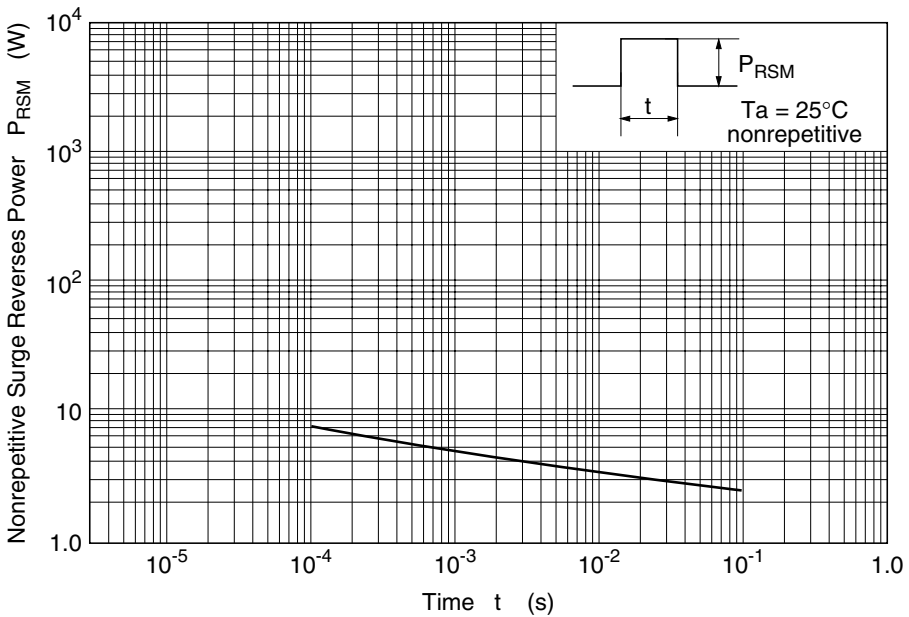


Fig.3 Surge Reverse Power Ratings

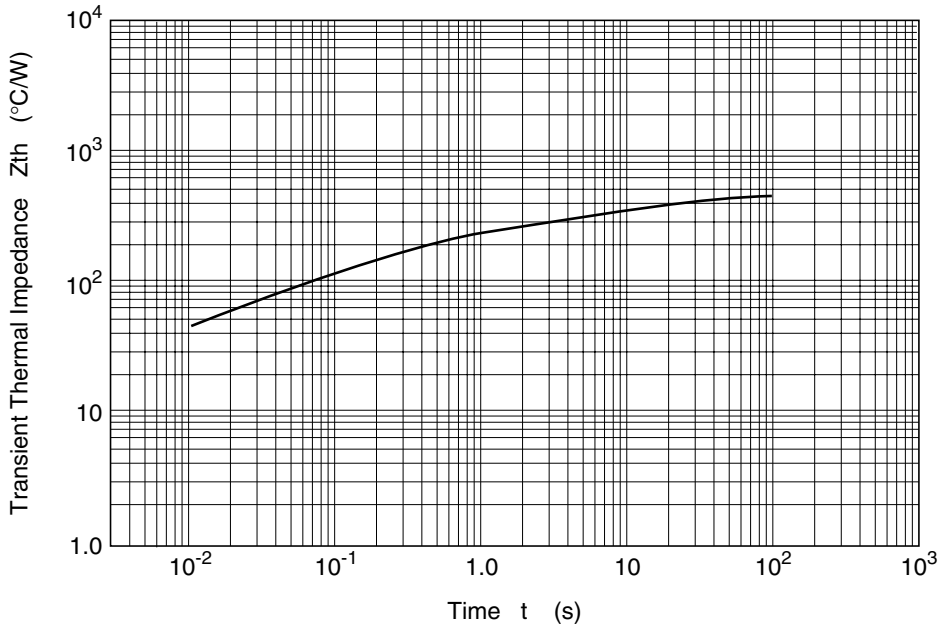
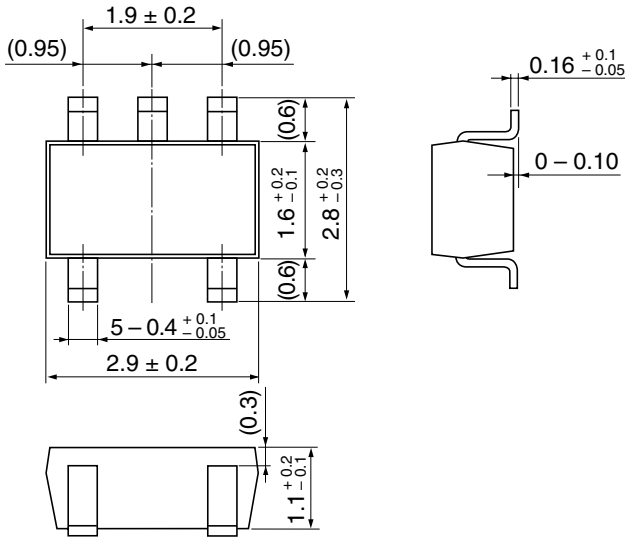


Fig.4 Transient Thermal Impedance

Package Dimensions

As of July, 2001  
Unit: mm



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

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