# HZM6.2ZFA

## Silicon Epitaxial Planar Zener Diode for Surge Absorb

HITACHI

ADE-208-593 (Z)
Rev 0

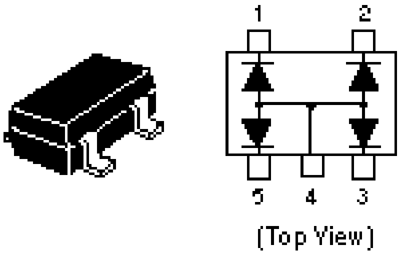
## Features

- HZM6.2ZFA has four devices, and can absorb external + and -surge.
- Low capacitance (C = 8.5pF 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 |

## Outline



1 Cathode
2 Cathode
3 Cathode
4 Anode
5 Cathode

Hitachi semiconductor

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

## Electrical Characteristics (Ta = 25°C) [*1]

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|---|---|---|---|---|---|---|
| Zener voltage | $V_Z$ | 5.90 | — | 6.50 | V | $I_Z$ = 5 mA, 40ms pulse |
| Reverse current | $I_R$ | — | — | 3 | μA | $V_R$ = 5.5 V |
| Capacitance | C | — | 8.0 | 8.5 | pF | $V_R$ = 0 V, f = 1 MHz |
| Dynamic resistance | $r_d$ | — | — | 60 | Ω | $I_Z$ = 5 mA |
| ESD-Capability [*2] | — | 13 | — | — | kV | C =150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse |

Notes: 1. Per one device.

2. Failure criterion ; $I_R \geq 3$ μA at $V_R$ = 5.5 V.

## Main Characteristic

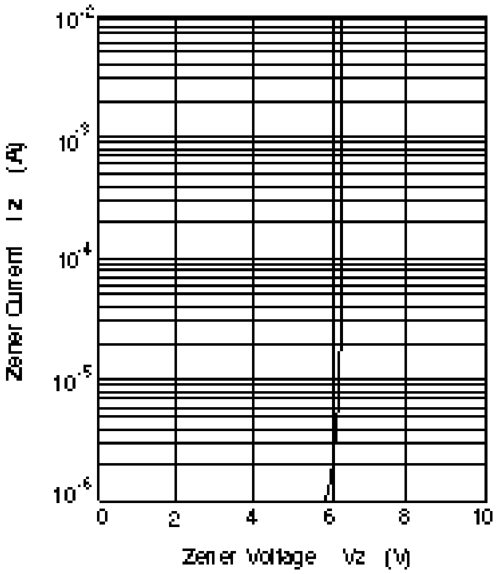


Fig.1 Zener current Vs. Zener voltage

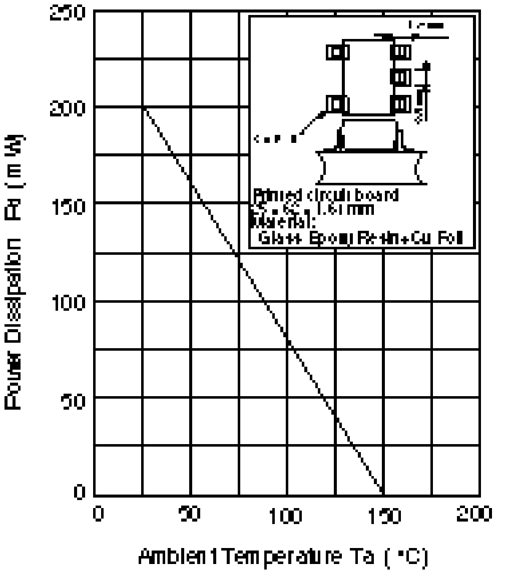


Fig.2 Power Dissipation Vs. Ambient Temperature

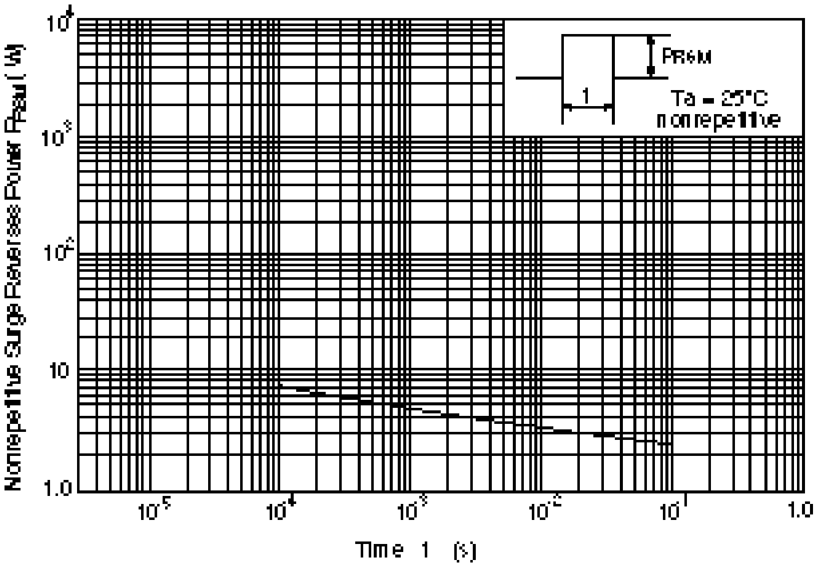


Fig.3 Surge Reverse Power Ratings

## Main Characteristic (cont)

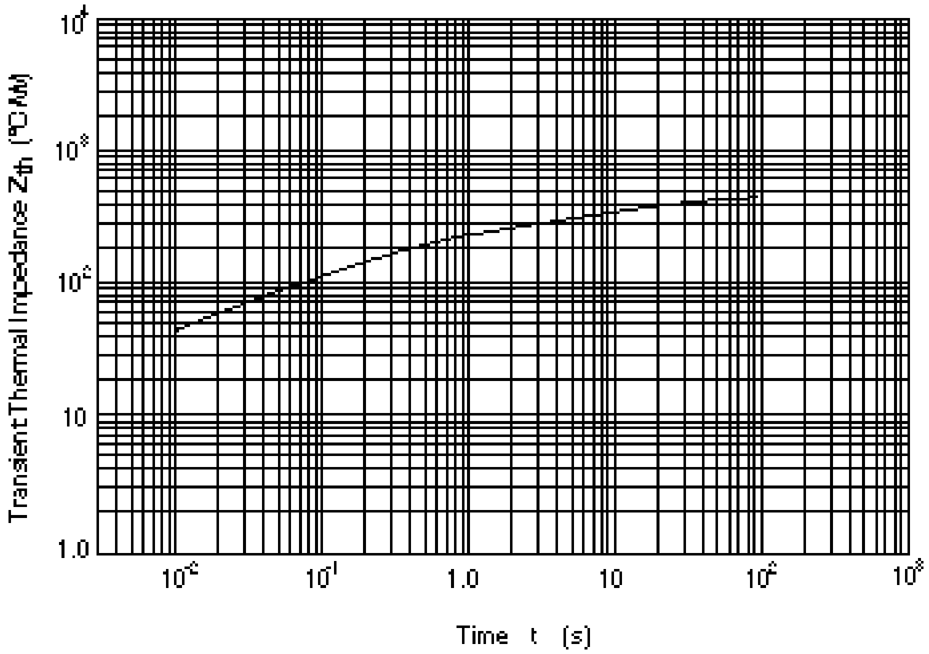
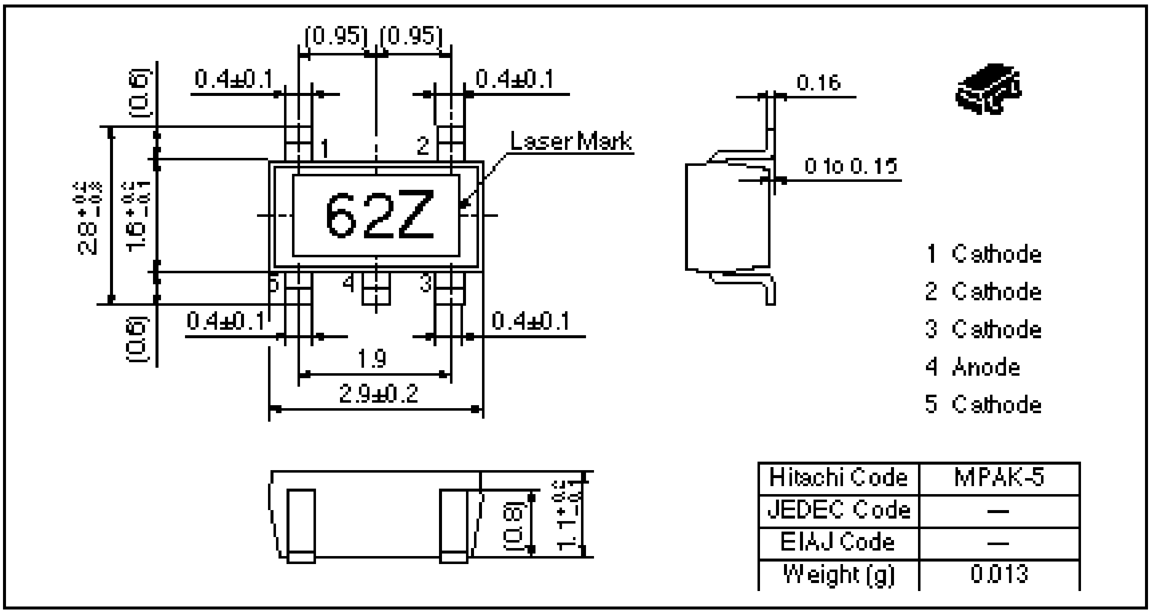


Fig.4 Transient Thermal Impedance

## Package Dimensions

Unit : mm



1 Cathode
2 Cathode
3 Cathode
4 Anode
5 Cathode

| | |
|---|---|
| Hitachi Code | MPAK-5 |
| JEDEC Code | — |
| EIAJ Code | — |
| Weight (g) | 0.013 |