# HZU6.2Z

## Silicon Epitaxial Planar Zener Diode for Surge Absorb

REJ03G1218-0200
(Previous: ADE-208-581A)
Rev.2.00
Jun 16, 2005

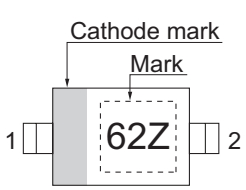
### Features

- Low capacitance (C = 8.5 pF max) and can protect signal line from ESD.
- Ultra small Resin Package (URP) is suitable for surface mount design.

### Ordering Information

| Type No. | Laser Mark | Package Name | Package Code (Previous Code) |
|---|---|---|---|
| HZU6.2Z | 62Z | URP | PTSP0002ZA-A (URP) |

### Pin Arrangement




1. Cathode
2. Anode

## 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: See Fig.2.

## Electrical Characteristics

(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|---|---|---|---|---|---|---|
| Zener voltage | $V_Z$ | 5.90 | — | 6.50 | V | $I_Z$ = 5 mA, 40 ms 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 |

## Main Characteristic

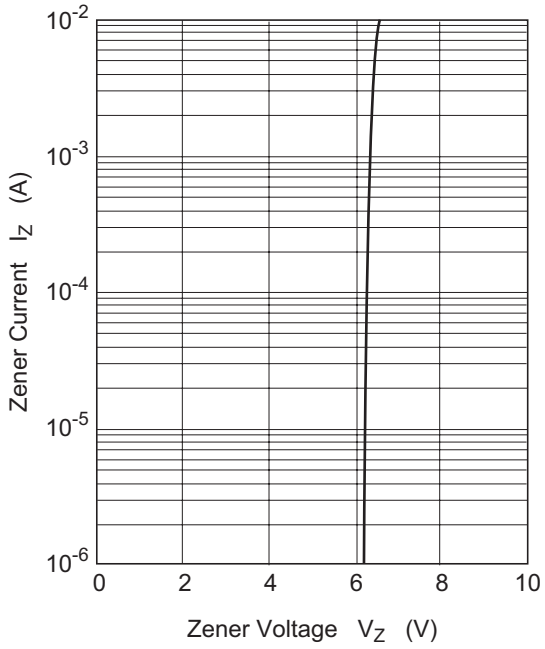



Fig.1 Zener current vs. Zener voltage

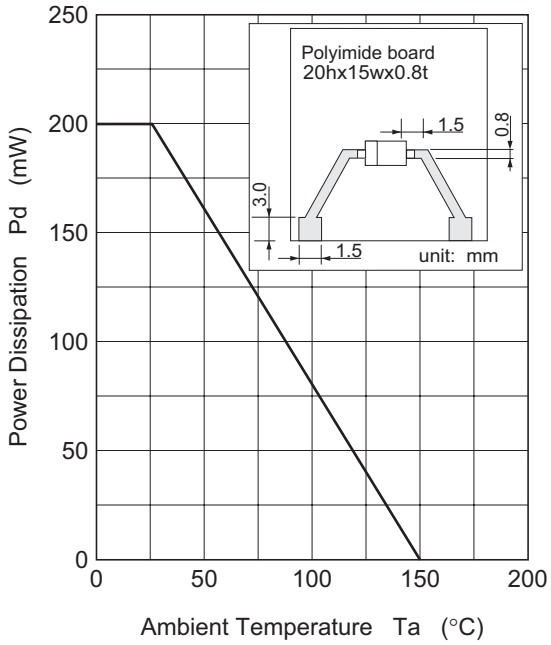



Fig.2 Power Dissipation vs. Ambient Temperature

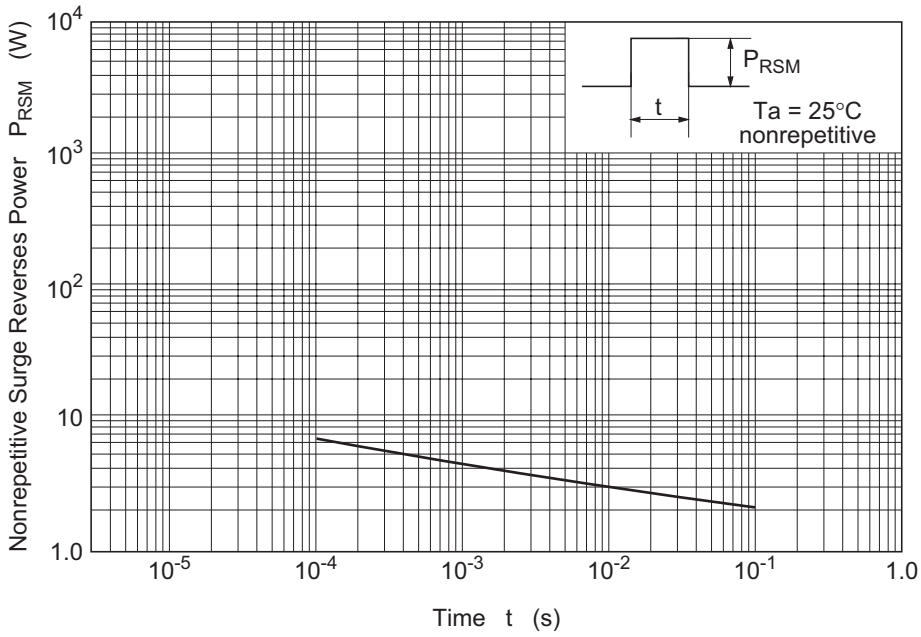



Fig.3 Surge Reverse Power Ratings

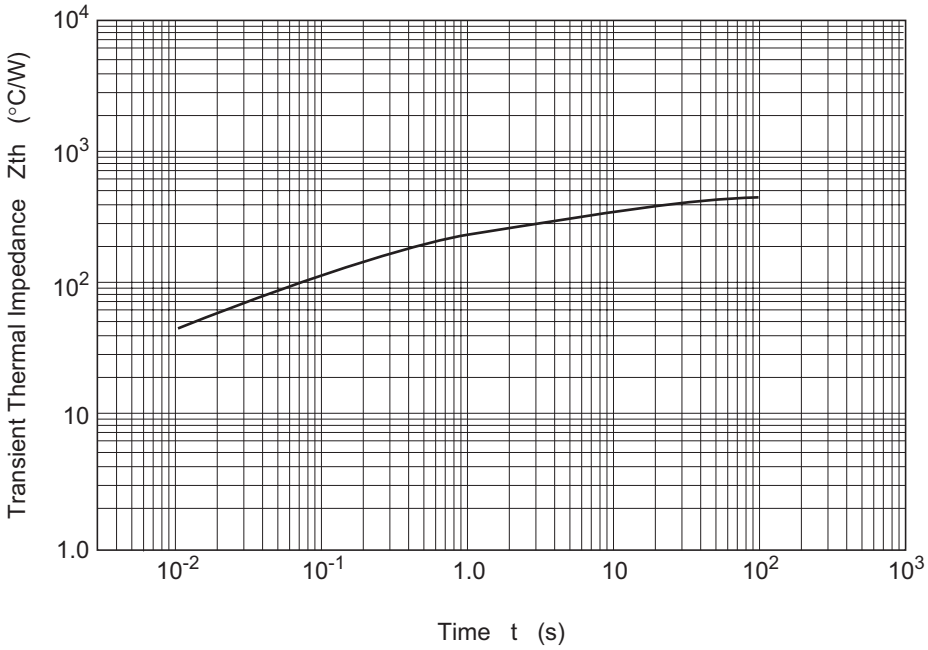
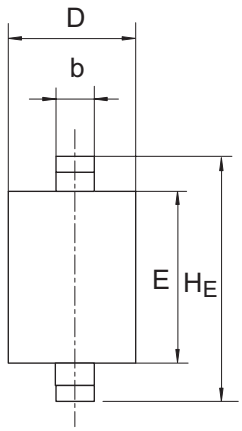
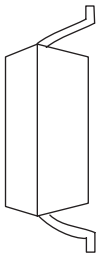


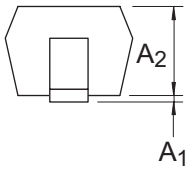

Fig.4 Transient Thermal Impedance

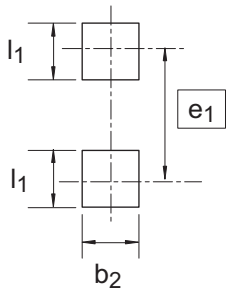
## Package Dimensions

| JEITA Package Code | RENESAS Code | Previous Code | MASS[Typ.] |
|---|---|---|---|
| SC-76A | PTSP0002ZA-A | URP / URPV | 0.004g |






Pattern of terminal position areas

| Reference Symbol | Dimension in Millimeters | | |
|---|---|---|---|
| | Min | Nom | Max |
| $A_1$ | 0 | - | 0.1 |
| $A_2$ | 0.75 | 0.90 | 1.05 |
| b | 0.15 | 0.30 | 0.45 |
| D | 1.10 | 1.25 | 1.40 |
| E | 1.55 | 1.70 | 1.85 |
| $H_E$ | 2.35 | 2.50 | 2.65 |
| $b_2$ | - | 0.80 | - |
| $e_1$ | - | 2.30 | - |
| $l_1$ | - | 0.80 | - |

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