

HZU6.8Z

Silicon Epitaxial Planar Zener Diode for Surge Absorb

HITACHI

ADE-208-777(Z)
Rev 0
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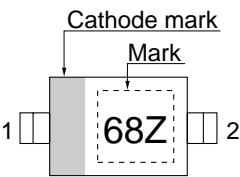
Features

- Low capacitance ($C=25\text{pF}$ max) and can protect ESD of signal line.
- Ultra small Resin Package (URP) is suitable for surface mount design.

Ordering Information

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HZU6.8Z | 68Z | URP |

Outline



1. Cathode
2. 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. See Fig.2.

Electrical Characteristics (Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|------------------------------|----------------|------|-----|------|------|--|
| Zener voltage | V _z | 6.47 | — | 7.00 | V | I _z = 5 mA, 40ms pulse |
| Reverse current | I _R | — | — | 2 | μA | V _R =3.5V |
| Capacitance | C | — | — | 25 | pF | V _R = 0V, f = 1 MHz |
| Dynamic resistance | r _d | — | — | 30 | Ω | I _z = 5 mA |
| ESD-Capability ^{*2} | — | 20 | — | — | kV | C =150pF, R = 330 Ω, Both forward and reverse direction 10 pulse |

Notes 1. Failure criterion ; IR > 2 μA at VR = 3.5V.

Main Characteristic

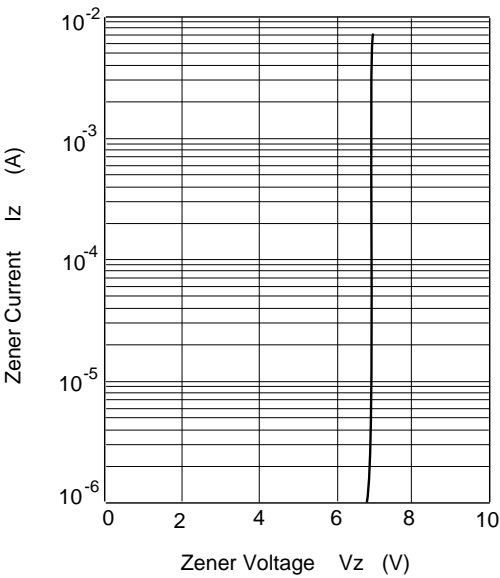


Fig.1 Zener current Vs. Zener voltage

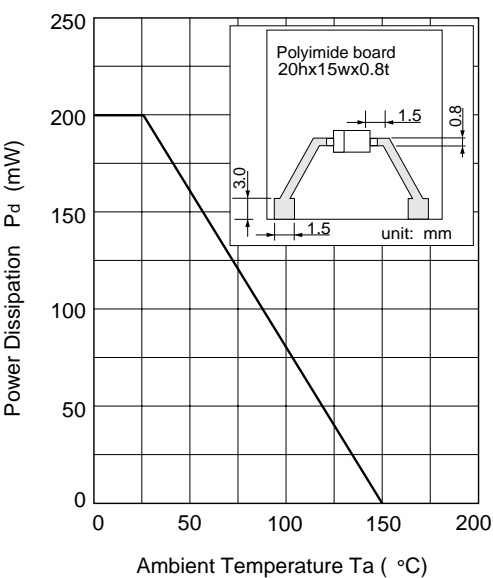


Fig.2 Power Dissipation Vs. Ambient Temperature

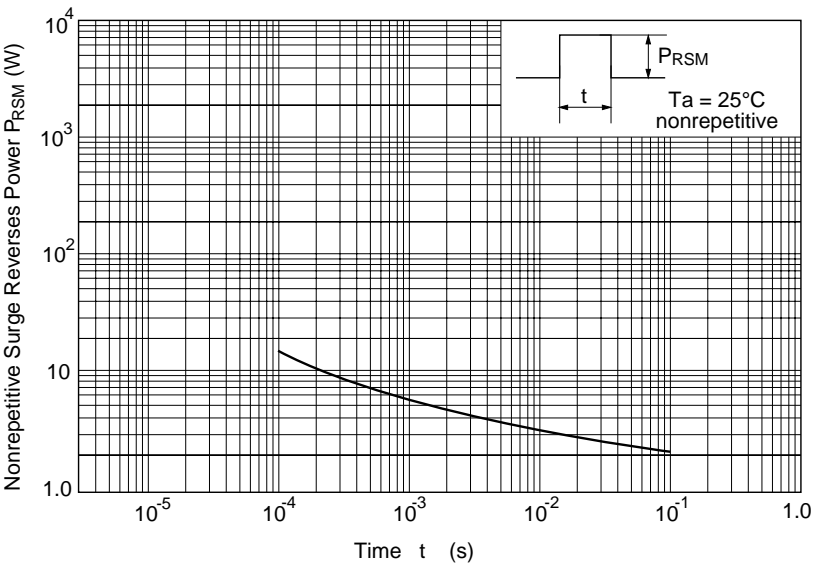


Fig.3 Surge Reverse Power Ratings

Main Characteristic

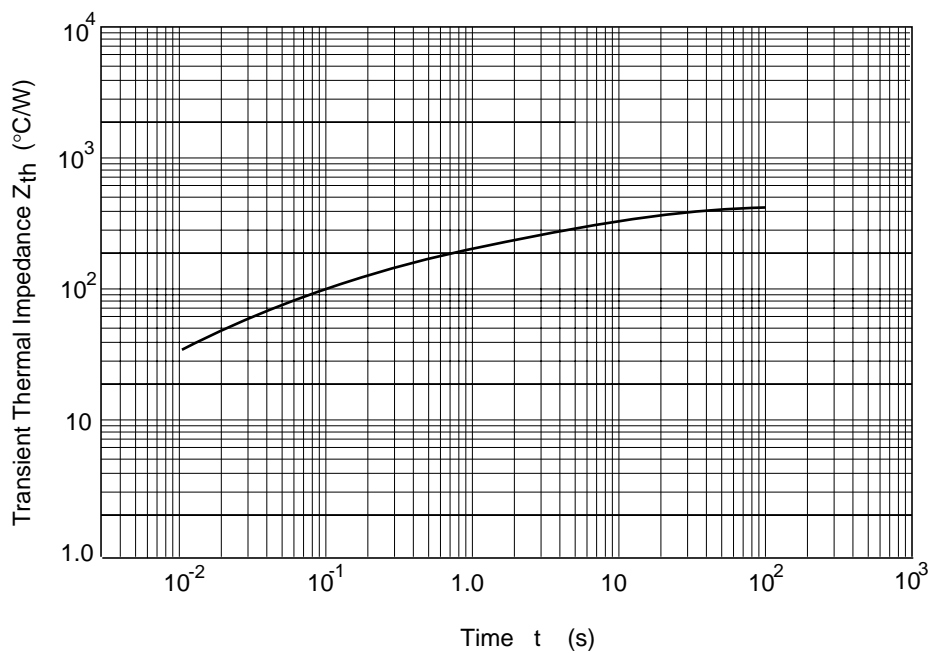
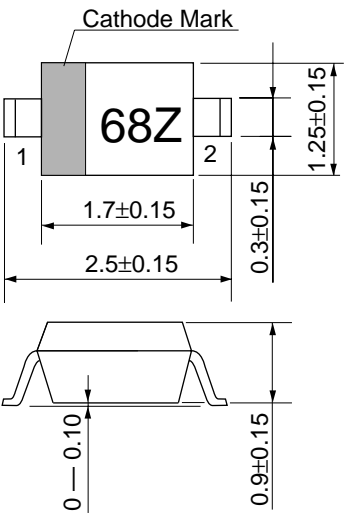


Fig.4 Transient Thermal Impedance

Package Dimensions

Unit : mm



- 1. Cathode
- 2. Anode

| | |
|--------------|-------|
| Hitachi Code | URP |
| JEDECCode | — |
| EIAJCode | — |
| Weight(g) | 0.004 |

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HITACHI

Hitachi, Ltd.

Semiconductor & Integrated Circuits.
Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan
Tel: Tokyo (03) 3270-2111 Fax: (03) 3270-5109

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For further information write to:

| | |
|--|---|
| Hitachi Semiconductor (America) Inc. 179 East Tasman Drive, San Jose, CA 95134 Tel: <1> (408) 433-1990 Fax: <1> (408) 433-0223 | Hitachi Europe GmbH Electronic components Group Dornacher Straße 3 D-85622 Feldkirchen, Munich Germany Tel: <49> (89) 9 9180-0 Fax: <49> (89) 9 29 30 00 Hitachi Europe Ltd. Electronic Components Group. Whitebrook Park Lower Cookham Road Maidenhead Berkshire SL6 8YA, United Kingdom Tel: <44> (1628) 585000 Fax: <44> (1628) 778322 |
|--|---|

Hitachi Asia Pte. Ltd.
16 Collyer Quay #20-00
Hitachi Tower
Singapore 049318
Tel: 535-2100
Fax: 535-1533

Hitachi Asia Ltd.
Taipei Branch Office
3F, Hung Kuo Building, No.167,
Tun-Hwa North Road, Taipei (105)
Tel: <886> (2) 2718-3666
Fax: <886> (2) 2718-8180

Hitachi Asia (Hong Kong) Ltd.
Group III (Electronic Components)
7/F., North Tower, World Finance Centre,
Harbour City, Canton Road, Tsim Sha Tsui,
Kowloon, Hong Kong
Tel: <852> (2) 735 9218
Fax: <852> (2) 730 0281
Telex: 40815 HITEC HX

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