

# HZU6.8Z

Silicon Epitaxial Planar Zener Diode for Surge Absorb

# HITACHI

ADE-208-777A (Z)

Rev.1  
Nov. 2001

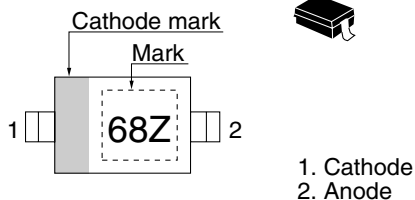
## Features

- 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

## 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: See Fig.2.

**Electrical Characteristics**

(Ta = 25°C)

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

Note: Failure criterion ; I<sub>R</sub> > 2 μA at V<sub>R</sub> = 3.5 V.

Main Characteristic

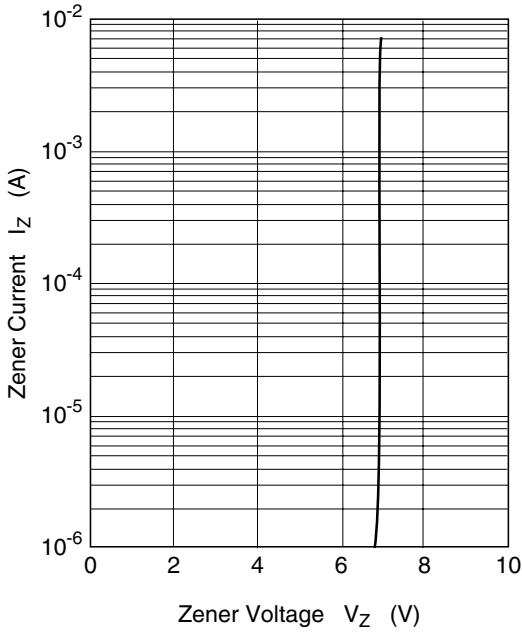


Fig.1 Zener current vs. Zener voltage

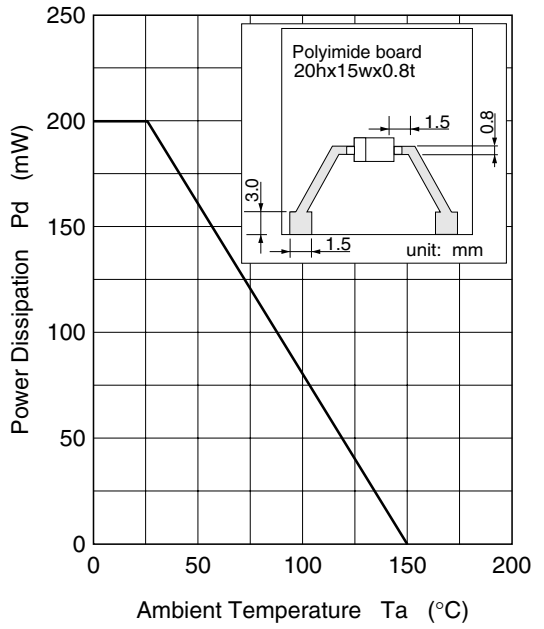


Fig.2 Power Dissipation vs. Ambient Temperature

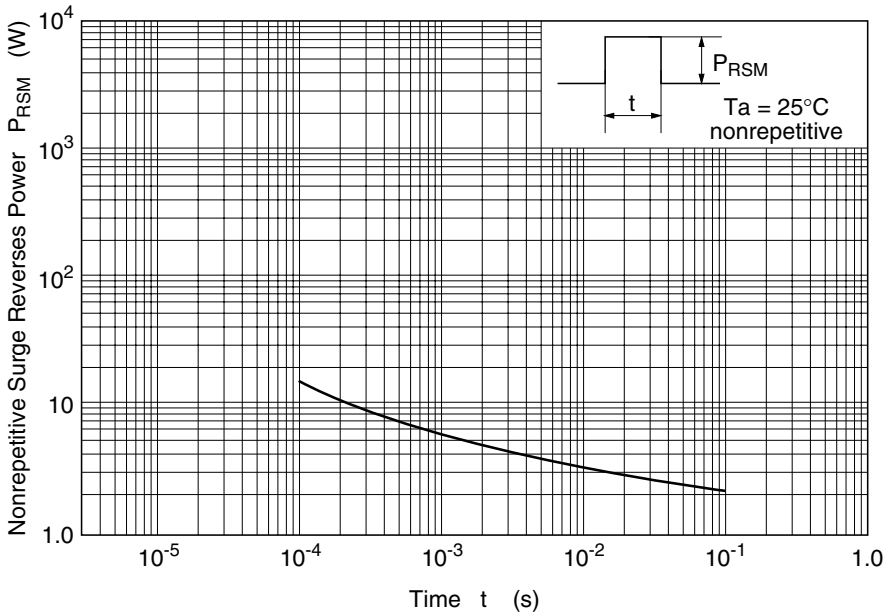


Fig.3 Surge Reverse Power Ratings

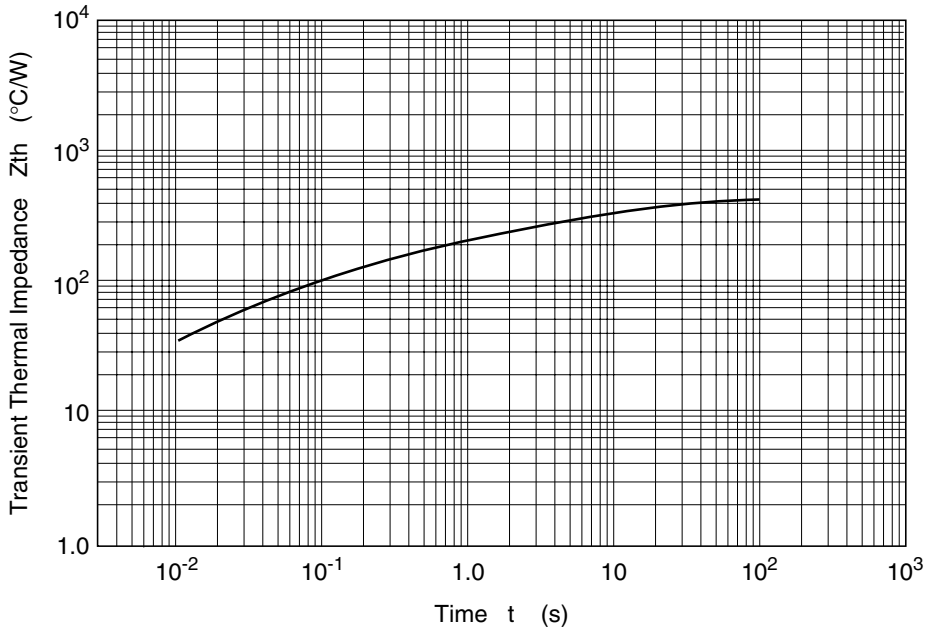
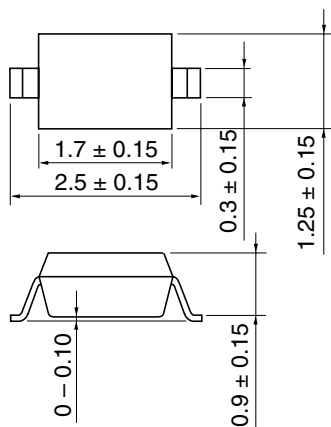


Fig.4 Transient Thermal Impedance

Package Dimensions

As of July, 2001

Unit: mm



Hitachi Code	URP
JEDEC	—
JEITA	—
Mass (reference value)	0.004 g

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