

# HZU5.6Z

Silicon Epitaxial Planar Zener Diode for Surge Absorb

# HITACHI

ADE-208-795(Z)

Rev 0

May. 1999

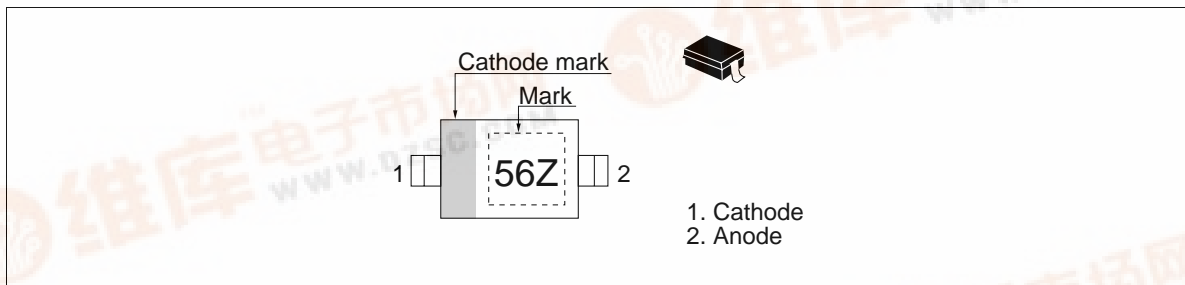
## Features

- Low capacitance ( $C=8.5\text{pF}$  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
HZU5.6Z	56Z	URP

## Outline



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### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd <sup>1</sup>	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 <sub>Z</sub>	5.31	—	5.92	V	I <sub>Z</sub> = 5 mA, 40ms pulse
Reverse current	I <sub>R</sub>	—	—	0.5	μA	V <sub>R</sub> = 2.5V
Capacitance	C	—	8.0	8.5	pF	V <sub>R</sub> = 0V, f = 1 MHz
Dynamic resistance	r <sub>d</sub>	—	—	80	Ω	I <sub>Z</sub> = 5 mA
ESD-Capability <sup>2</sup>	—	8	—	—	kV	C = 150pF, R = 330 Ω, Both forward and reverse direction 10 pulse

Notes 1. Failure criterion ; IR > 0.5 μA at VR = 2.5V.

Main Characteristic

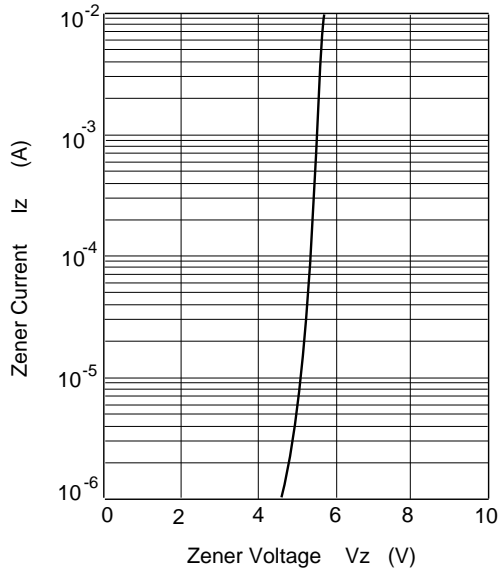


Fig.1 Zener current Vs. Zener voltage

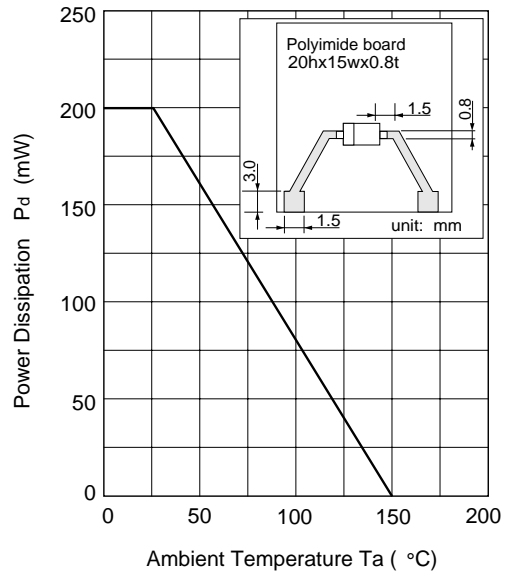


Fig.2 Power Dissipation Vs. Ambient Temperature

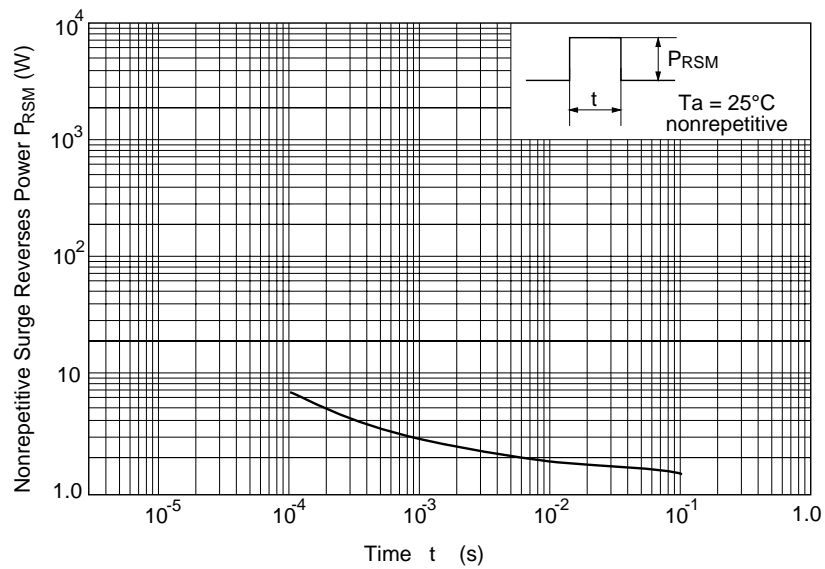


Fig.3 Surge Reverse Power Ratings

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## HZU5.6Z

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### Main Characteristic

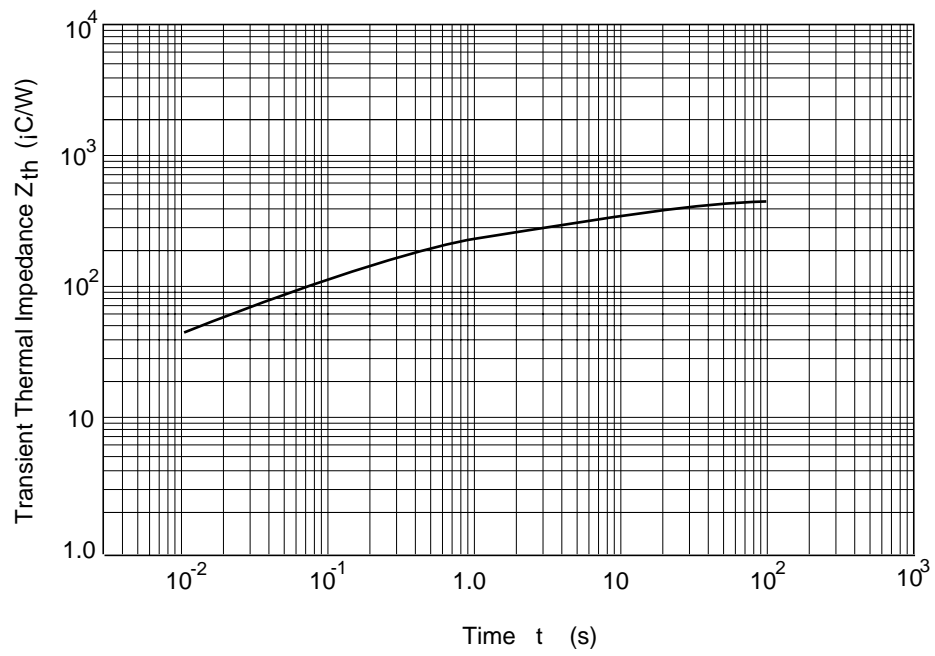
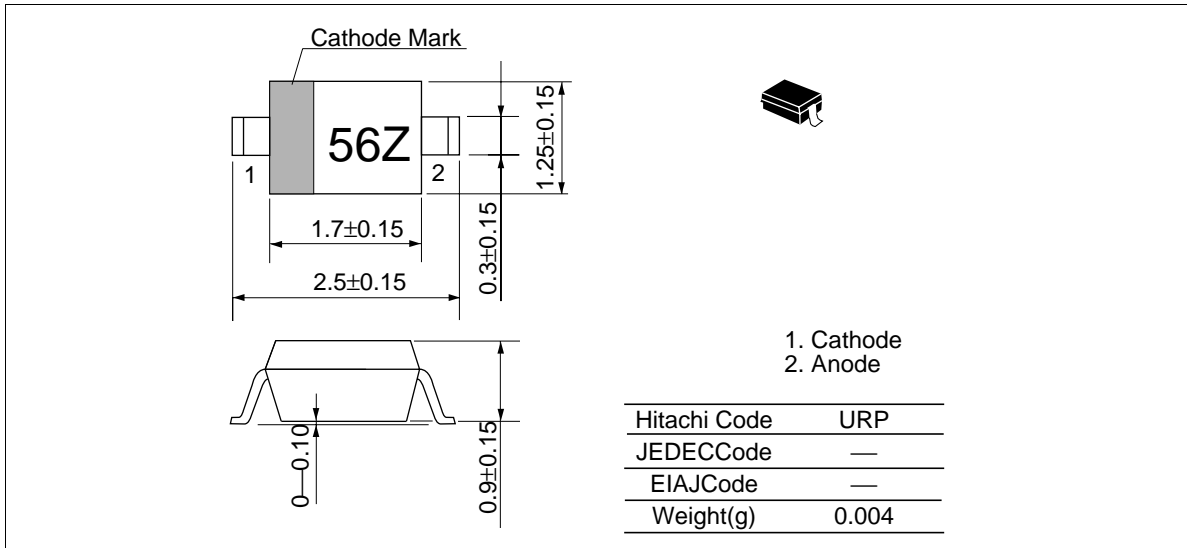


Fig.4 Transient Thermal Impedance

**Package Dimensions**

Unit : mm



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