
HZM6.8ZWA

Silicon Epitaxial Planar Zener Diode for Surge Absorb

HITACHI

ADE-208-613A(Z)

Rev 1

Jan. 1999

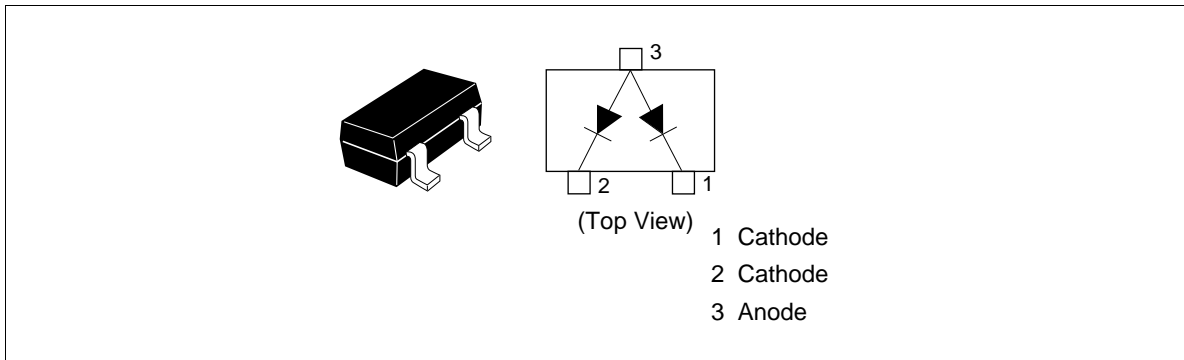
Features

- HZM6.8ZWA has two devices, and can absorb external + and -surge.
- Low capacitance ($C=25\text{pF}$ max) and can protect ESD of signal line.
- MPAK Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HZM6.8ZWA	68Z	MPAK

Outline



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Value	Unit
Power dissipation	P_d ¹	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note 1. Two device total, See Fig.2.

HZM6.8ZWA

Electrical Characteristics (Ta = 25°C) *1

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V_Z	6.47	—	7.00	V	$I_Z = 5 \text{ mA}$, 40ms pulse
Reverse current	I_R	—	—	2	μA	$V_R = 3.5\text{V}$
Capacitance	C	—	—	25	pF	$V_R = 0\text{V}$, $f = 1 \text{ MHz}$
Dynamic resistance	r_d	—	—	30	Ω	$I_Z = 5 \text{ mA}$
ESD-Capability *2	—	20	—	—	kV	C = 150pF, R = 330 Ω , Both forward and reverse direction 10 pulse

- Notes
1. Per one device.
 2. Failure criterion ; $I_R > 2 \mu\text{A}$ at $V_R = 3.5\text{V}$.

Main Characteristic

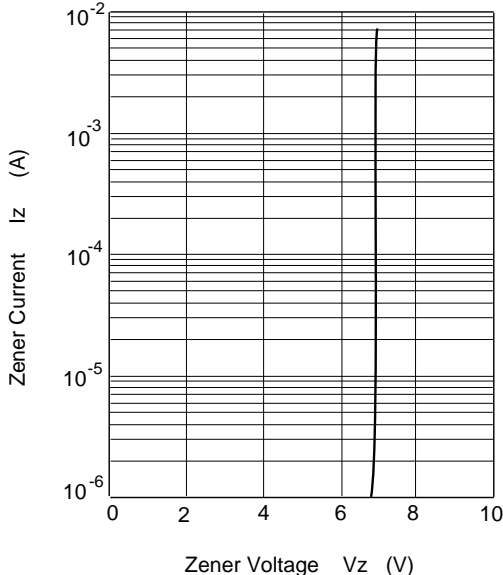


Fig.1 Zener current Vs. Zener voltage

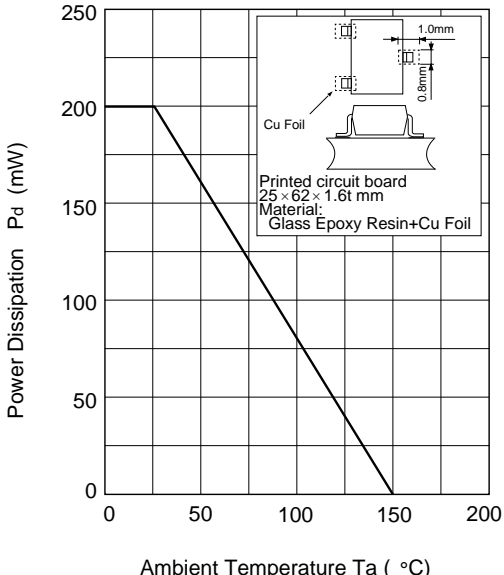


Fig.2 Power Dissipation Vs. Ambient Temperature

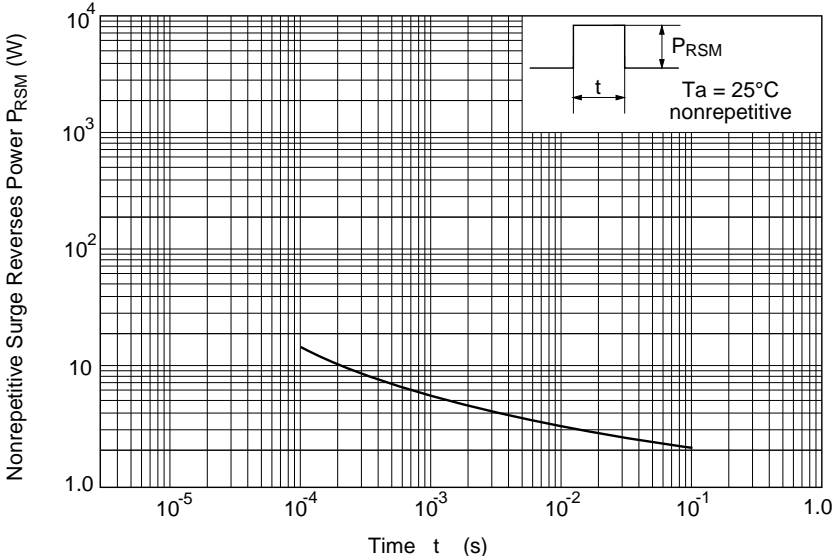


Fig.3 Surge Reverse Power Ratings

Main Characteristic

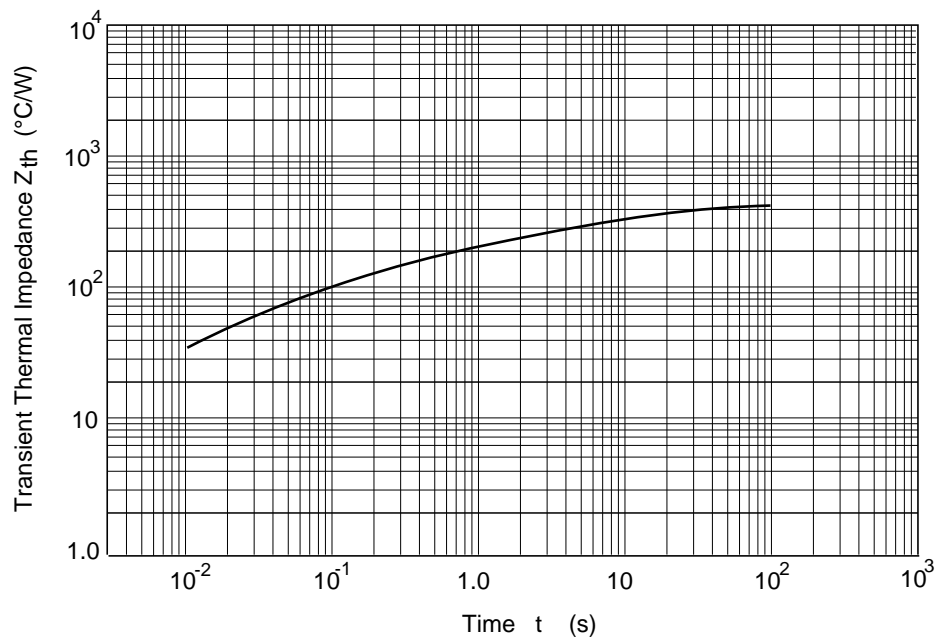
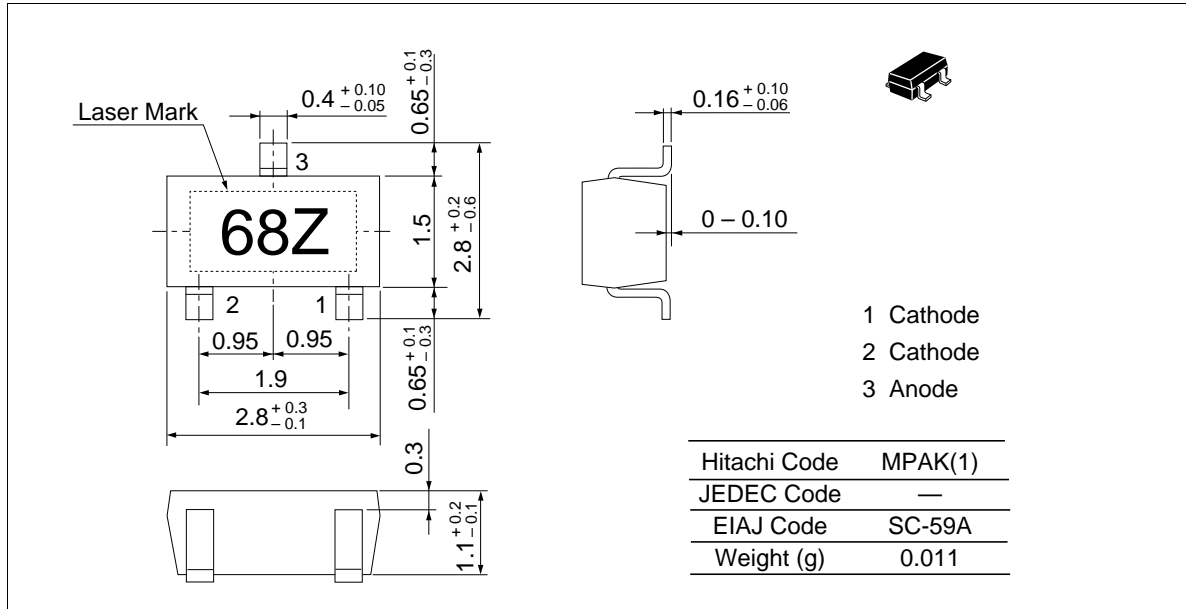


Fig.4 Transient Thermal Impedance

Package Dimensions

Unit : mm



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