HZM6.8ZFA

Silicon Epitaxial Planar Zener Diode for Surge Absorb

HITACHI

ADE-208-614 (Z)
Rev 0
April 1, 1998

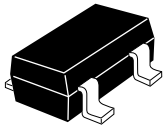
Features

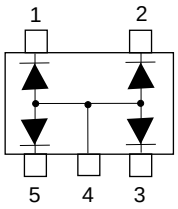
- HZM6.8ZFA has four devices, and can absorb external + and -surge.
- Low capacitance (C=25pF max) and can protect ESD of signal line.
- MPAK-5 Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HZM6.8ZFA	68Z	MPAK-5

Outline





(Top View)

1 Cathode
2 Cathode
3 Cathode
4 Anode
5 Cathode

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. Four device total, See Fig.2.

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 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. Per one device.
2. Failure criterion ; IR > 2 μA at VR = 3.5V.

Main Characteristic

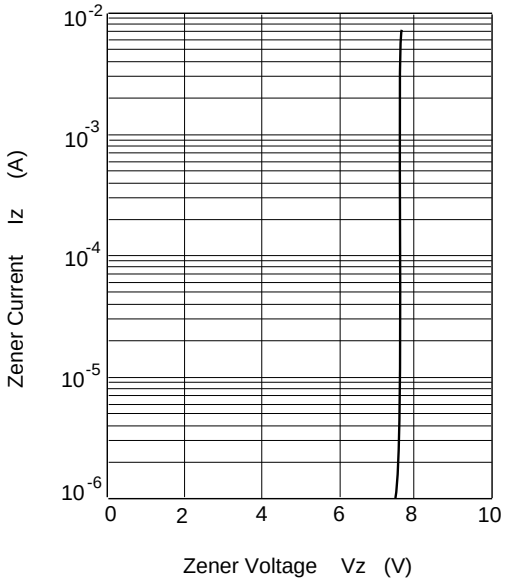


Fig.1 Zener current Vs. Zener voltage

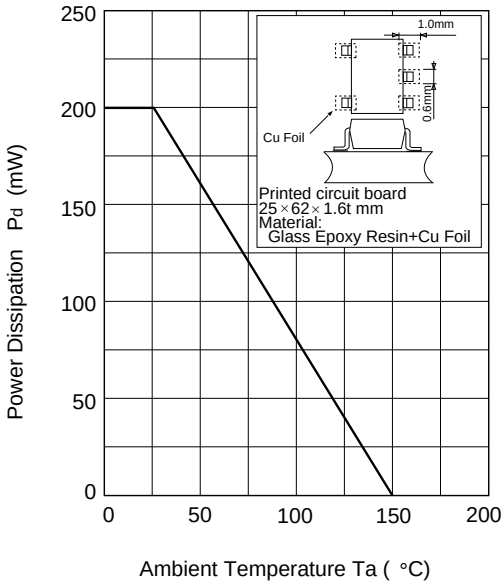


Fig.2 Power Dissipation Vs. Ambient Temperature

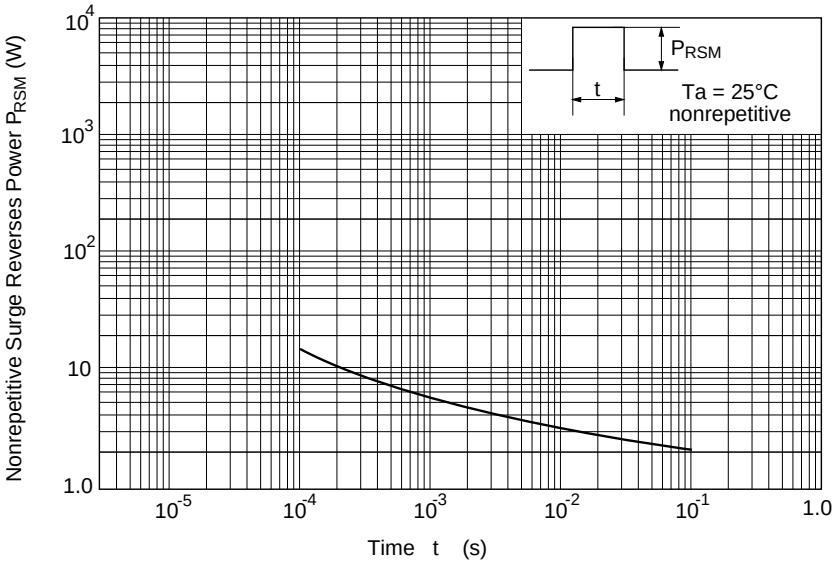


Fig.3 Surge Reverse Power Ratings

Main Characteristic

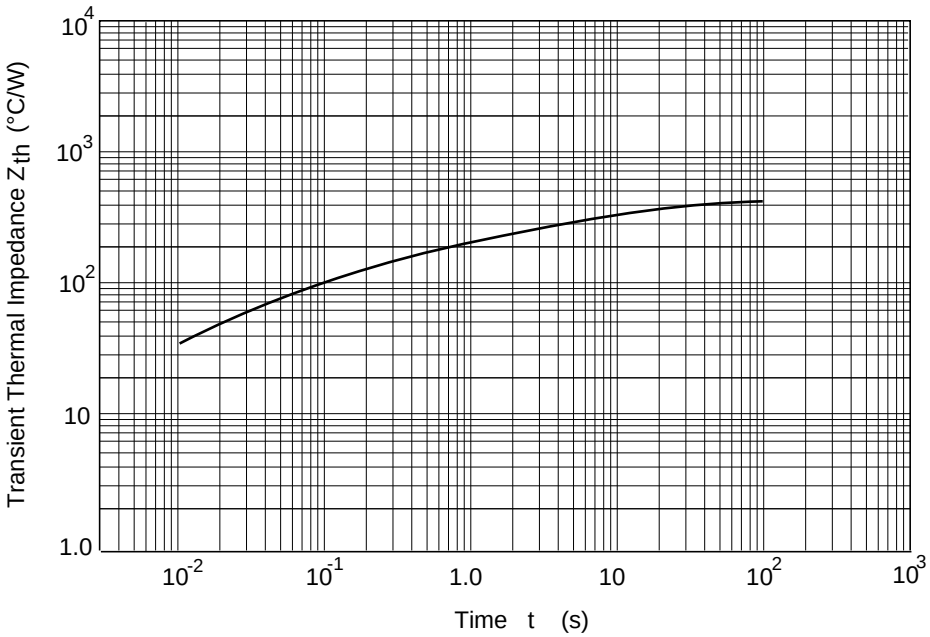
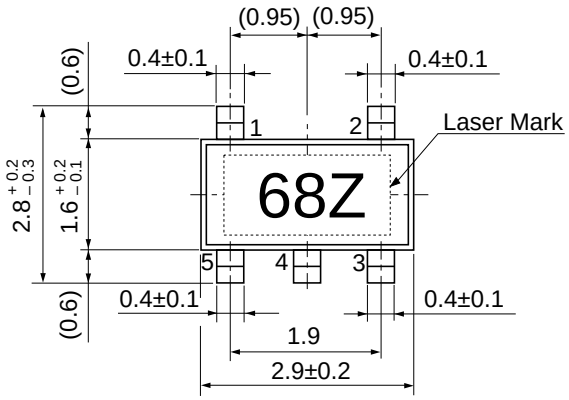
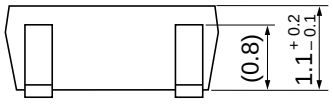
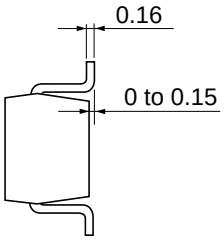


Fig.4 Transient Thermal Impedance

Package Dimensions (Unit : mm)







1 Cathode
2 Cathode
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5 Cathode

Hitachi Code	MPAK-5
JEDEC Code	—
EIAJ Code	—
Weight (g)	0.013

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