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# HZM6.8ZMFA

Silicon Planar Zener Diode for Surge Absorb

# HITACHI

ADE-208-783A(Z)

Rev. 1  
Nov. 1999

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## Features

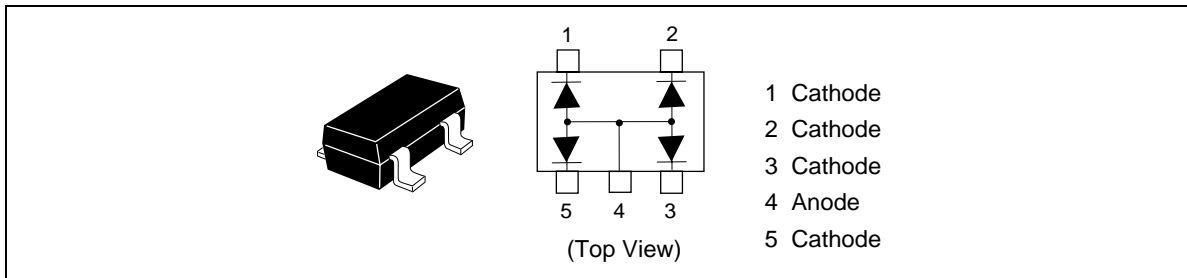
- HZM6.8ZMFA has four devices in a monolithic, and can absorb surge.
- Low capacitance ( $C=25\text{pF}$  max) and can protect ESD of signal line.
- MPAK-5 Package is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HZM6.8ZMFA	68N	MPAK-5

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## Outline



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## HZM6.8ZMFA

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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. Four device total, See Fig.2.

### Electrical Characteristics\*<sup>1</sup>

(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, 40ms pulse
Reverse current	I <sub>R</sub>	—	—	2	μA	V <sub>R</sub> = 3.5V
Capacitance	C	—	—	25	pF	V <sub>R</sub> = 0V, f = 1 MHz
Dynamic resistance	r <sub>d</sub>	—	—	30	Ω	I <sub>z</sub> = 5 mA
ESD-Capability * <sup>2</sup> * <sup>3</sup>	—	25	—	—	kV	C = 150pF, R = 330 Ω, Both forward and reverse direction 10 pulse

- Notes
1. Per one device.
  2. Failure criterion ; I<sub>R</sub> > 2 μA at V<sub>R</sub> = 3.5V.
  3. Between cathode and anode.

Main Characteristic

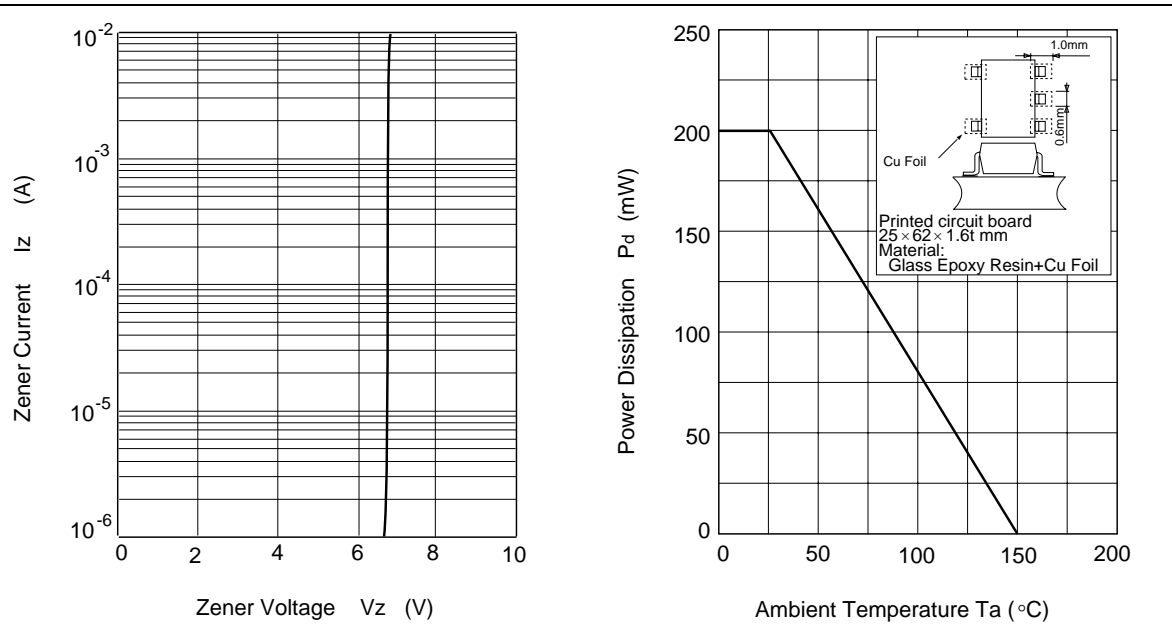


Fig.1 Zener current Vs. Zener voltage

Fig.2 Power Dissipation Vs. Ambient Temperature

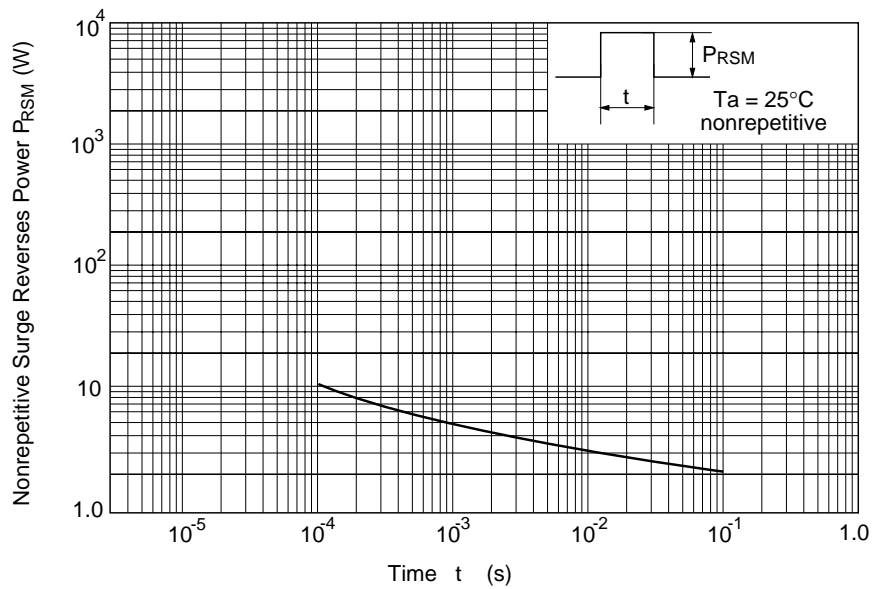
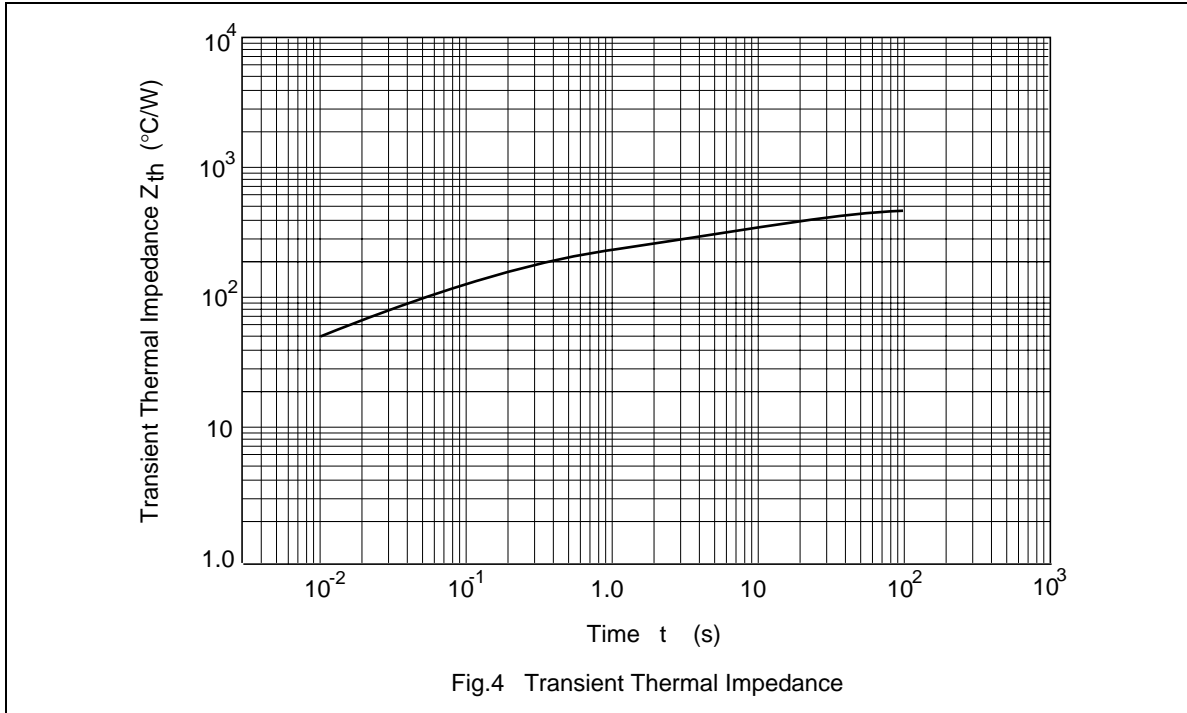


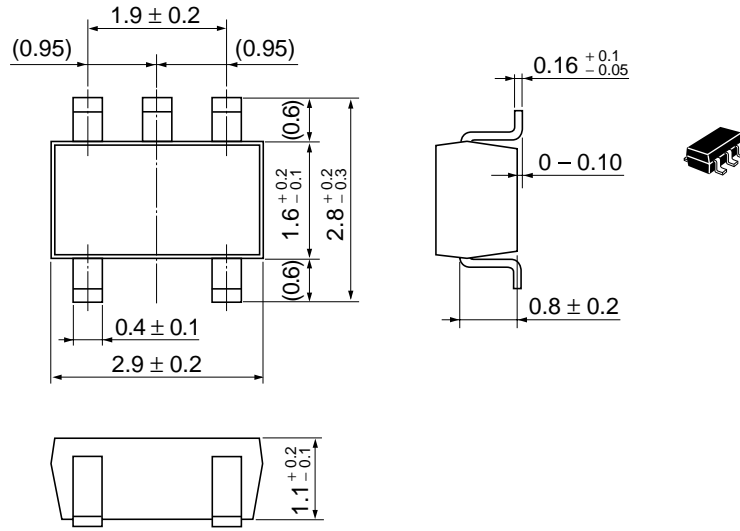
Fig.3 Surge Reverse Power Ratings

**Main Characteristic**



Package Dimensions

Unit: mm



Hitachi Code	MPAK-5
JEDEC	—
EIAJ	—
Mass	0.013 g

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## HZM6.8ZMFA

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# HITACHI

#### Hitachi, Ltd.

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

URL    NorthAmerica    : <http://semiconductor.hitachi.com/>  
       Europe            : <http://www.hitachi-eu.com/hel/ecg>  
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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 Ltd.  
Electronic Components Group  
Whitebrook Park  
Lower Cookham Road  
Maidenhead  
Berkshire SL6 8YA, United Kingdom  
Tel: <44> (1628) 585000  
Fax: <44> (1628) 585200

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 Asia Ltd.  
Hitachi Tower  
16 Collyer Quay #20-00  
Singapore 049318  
Tel: <65>-538-6533/538-8577  
Fax: <65>-538-6933/538-3877  
URL: <http://www.hitachi.com.sg>

Hitachi Asia Ltd.  
(Taipei Branch Office)  
4/F, No. 167, Tun Hwa North Road  
Hung-Kuo Building  
Taipei (105), Taiwan  
Tel: <886>-(2)-2718-3666  
Fax: <886>-(2)-2718-8180  
Telex: 23222 HAS-TP  
URL: <http://www.hitachi.com.tw>

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  
URL: <http://semiconductor.hitachi.com.hk>

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