HZM6.8MFA

Silicon Planar Zener Diode for Surge Absorb

HITACHI

ADE-208-833A (Z)

Rev.1 Nov. 2001

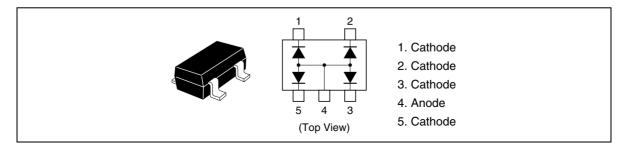
Features

- HZM6.8MFA has four devices in a monolithic, and can absorb surge.
- MPAK-5 Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HZM6.8MFA	68M	MPAK-5

Pin Arrangement





HZM6.8MFA

Absolute Maximum Ratings

 $(Ta = 25^{\circ}C)$

Item	Symbol	Value	Unit	
Power dissipation	Pd *	200	mW	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55 to +150	°C	

Note: Four device total, See Fig. 2.

Electrical Characteristics*¹

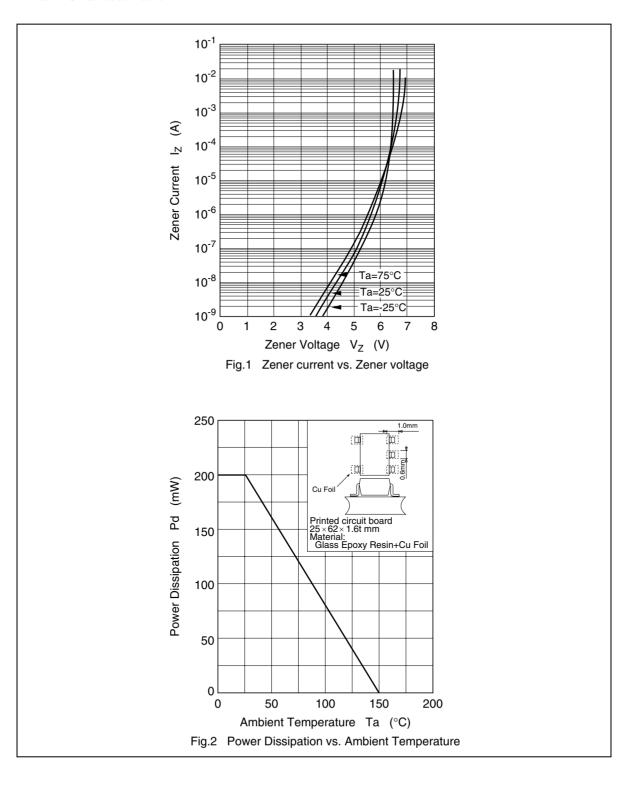
 $(Ta = 25^{\circ}C)$

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Zener voltage	V _z	6.47	_	7.00	V	$I_z = 5$ mA, 40 ms pulse
Reverse current	I _R	_		2	μΑ	V _R = 3.5 V
Capacitance	С	_	_	130	pF	V _R = 0 V, f = 1 MHz
Dynamic resistance	r _d	_	_	30	Ω	$I_z = 5 \text{ mA}$
ESD-Capability *2	_	30	_	_	kV	$C = 150 \text{ pF}, R = 330 \Omega$, Both forward and reverse direction 10 pulse

Notes: 1. Per one device.

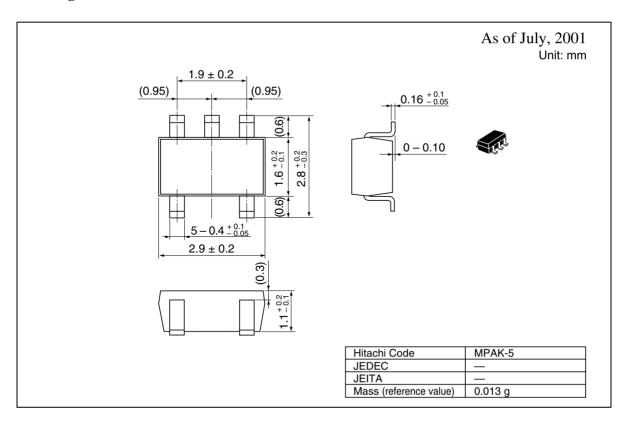
2. Failure criterion ; $I_{\mbox{\tiny R}} > 2~\mu\mbox{A}$ at $V_{\mbox{\tiny R}} = 3.5~\mbox{V}.$

Main Characteristic



HZM6.8MFA

Package Dimensions



Disclaimer

- 1. Hitachi neither warrants nor grants licenses of any rights of Hitachi's or any third party's patent. copyright, trademark, or other intellectual property rights for information contained in this document. Hitachi bears no responsibility for problems that may arise with third party's rights, including intellectual property rights, in connection with use of the information contained in this document.
- 2. Products and product specifications may be subject to change without notice. Confirm that you have received the latest product standards or specifications before final design, purchase or use.
- 3. Hitachi makes every attempt to ensure that its products are of high quality and reliability. However, contact Hitachi's sales office before using the product in an application that demands especially high quality and reliability or where its failure or malfunction may directly threaten human life or cause risk of bodily injury, such as aerospace, aeronautics, nuclear power, combustion control, transportation, traffic, safety equipment or medical equipment for life support.
- 4. Design your application so that the product is used within the ranges guaranteed by Hitachi particularly for maximum rating, operating supply voltage range, heat radiation characteristics, installation conditions and other characteristics. Hitachi bears no responsibility for failure or damage when used beyond the guaranteed ranges. Even within the guaranteed ranges, consider normally foreseeable failure rates or failure modes in semiconductor devices and employ systemic measures such as failsafes, so that the equipment incorporating Hitachi product does not cause bodily injury, fire or other consequential damage due to operation of the Hitachi product.
- 5. This product is not designed to be radiation resistant.
- 6. No one is permitted to reproduce or duplicate, in any form, the whole or part of this document without written approval from Hitachi.
- 7. Contact Hitachi's sales office for any questions regarding this document or Hitachi semiconductor products.

Sales Offices

HITACHI

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 http://www.hitachisemiconductor.com/

For further information write to:

Hitachi Semiconductor (America) Inc. 179 East Tasman Drive San Jose, CA 95134

Hitachi Europe Ltd. Electronic Components Group Whitebrook Park Lower Cookham Road Tel: <1> (408) 433-1990 Maidenhead Tel: <65>-538-6533/538-8577 Fax: <1> (408) 433-0223 Berkshire SL6 8YA, United Kingdom Fax: <65>-538-6933/538-3877

Tel: <44> (1628) 585000 Fax: <44> (1628) 585200

Hitachi Europe GmbH Electronic Components Group Dornacher Straße 3 D-85622 Feldkirchen Postfach 201, D-85619 Feldkirchen Germany

Tel: <49> (89) 9 9180-0 Fax: <49> (89) 9 29 30 00 Hitachi Asia Ltd. Hitachi Tower 16 Collver Quay #20-00 Singapore 049318

URL: http://semiconductor.hitachi.com.sg Tel: <852>-(2)-735-9218

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

Copyright © Hitachi, Ltd., 2001. All rights reserved. Printed in Japan. Colophon 5.0

Tsim Sha Tsui, Kowloon Hong Kong

Hitachi Asia (Hong Kong) Ltd.

Harbour City, Canton Road

7/F., North Tower World Finance Centre.

Group III (Electronic Components)

Fax: <852>-(2)-730-0281 URL: http://semiconductor.hitachi.com.hk