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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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Keep safety first in your circuit designs!

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Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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HZU-G Series

S Silicon Epitaxial Planar Zener Diode for Surge Absorb



ADE-208-617A (Z)

Rev.1
Nov. 2001

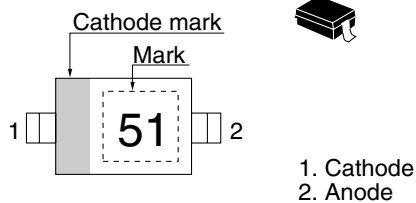
Features

- Zener diode for surge absorb suitable for IEC 1000-4-2 and 5 to 10V products are available.
- Ultra small Resin Package (URP) is suitable for surface mount design.

Ordering Information

Type No.	Mark	Package Code
HZU-G Series	Let to Mark Code	URP

Pin Arrangement



HZU-G Series

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. See Fig2

Electrical Characteristics

(Ta = 25°C)

Type	Zener voltage		Reverse current		Dynamic resistance		ESD-Capability	
	V _z (V) * ¹		I _R (μA)		r _d (Ω)		— (kV) * ²	
	Min	Max	I _z (mA)	Max	V _R (V)	Max	I _z (mA)	Min
HZU5.1G	4.84	5.37	5	5	1.5	130	5	30
HZU5.6G	5.31	5.92	5	5	2.5	80	5	30
HZU6.2G	5.86	6.53	5	2	3.0	50	5	30
HZU6.8G	6.47	7.14	5	2	3.5	30	5	30
HZU7.5G	7.06	7.84	5	2	4.0	30	5	30
HZU8.2G	7.76	8.64	5	2	5.0	30	5	30
HZU9.1G	8.56	9.55	5	2	6.0	30	5	30
HZU10G	9.45	10.55	5	2	7.0	30	5	30
HZU12G	11.42	12.60	5	2	9.0	35	5	30

Notes: 1. Tested with pulse (Pw = 40 ms).

2. C =150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse
Failure criterion ; According to IR spec

Mark Code

Type	MarK No.	Type	Mark No.
HZU5.1G	51	HZU8.2G	82
HZU5.6G	56	HZU9.1G	91
HZU6.2G	62	HZU10G	10
HZU6.8G	68	HZU12G	12
HZU7.5G	75		

Main Characteristic

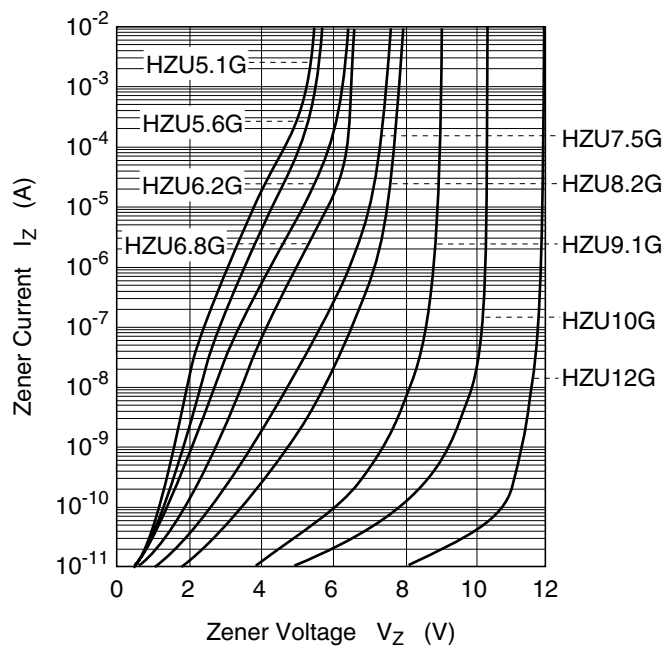


Fig.1 Zener current vs. Zener voltage

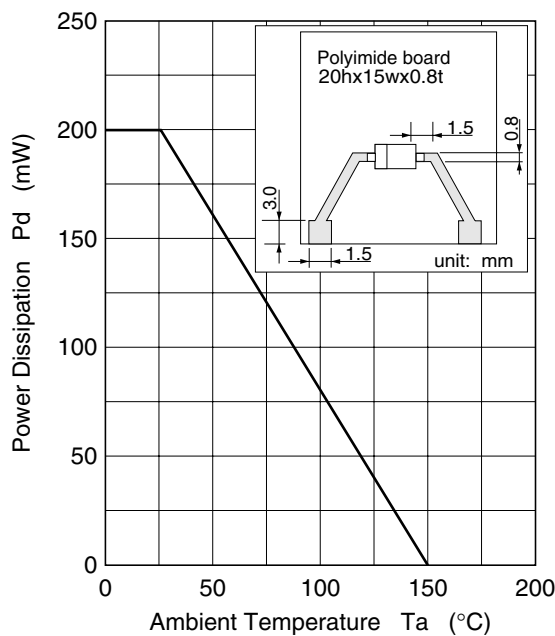
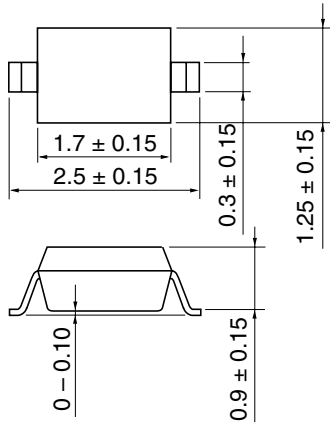


Fig.2 Power Dissipation vs. Ambient Temperature

Package Dimensions

As of July, 2001
 Unit: mm



Hitachi Code	URP
JEDEC	—
JEITA	—
Mass (reference value)	0.004 g

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Sales Offices

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 <http://www.hitachisemiconductor.com/>

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
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 Collyer Quay #20-00
Singapore 049318
Tel: <65>-538-6533/538-8577
Fax: <65>-538-6933/538-3877
URL: <http://semiconductor.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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