To all our customers

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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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HZU-G Series

S Silicon Epitaxial Planar Zener Diode for Surge Absorb

ADE-208-617A (Z)

Rev.1
Nov. 2001

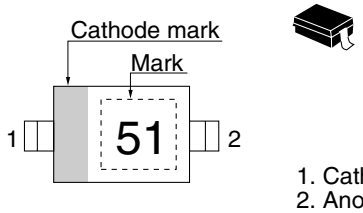
Features

- 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



1. Cathode
2. Anode

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)

	Zener voltage			Reverse current		Dynamic resistance		ESD-Capability
	V_Z (V) *[1]		Test Condition	I_R (µA)	Test Condition	r_d (Ω)	Test Condition	— (kV) *[2]
Type	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

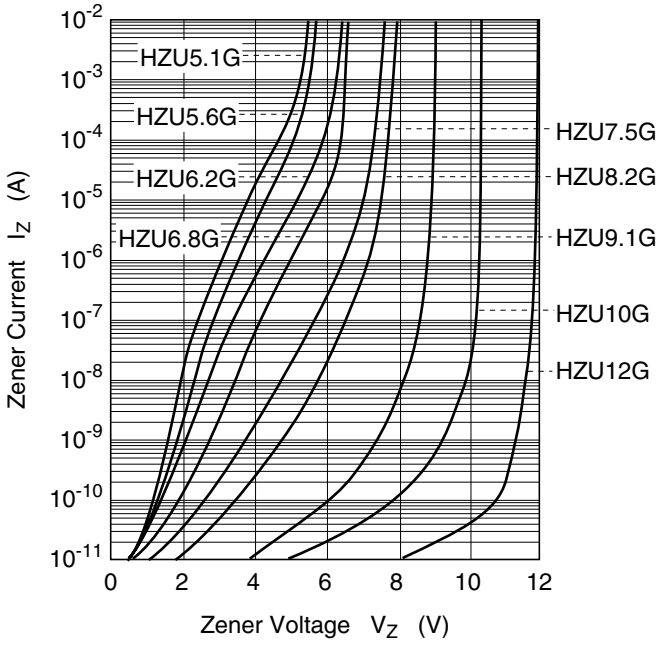


Fig.1 Zener current vs. Zener voltage

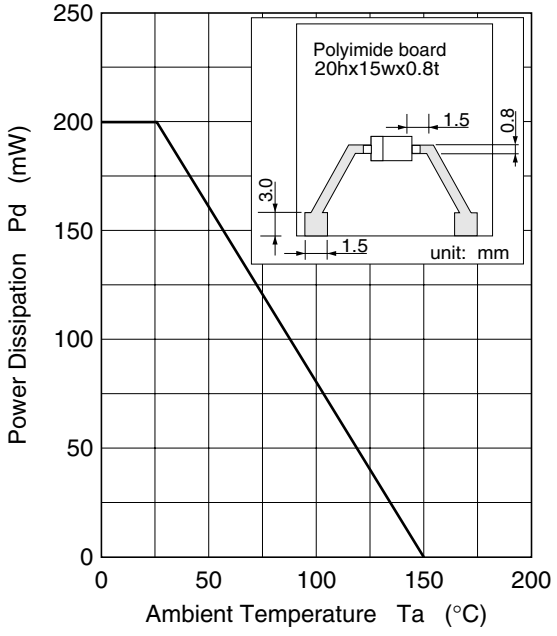
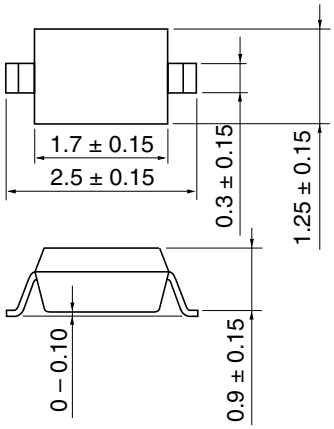


Fig.2 Power Dissipation vs. Ambient Temperature

Package Dimensions

As of July, 2001

Unit: mm



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

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