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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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RKZ6.8Z4KT

Silicon Planar Zener Diode for Surge Absorption

REJ03G1820-0100
Rev.1.00
Sep 15, 2009

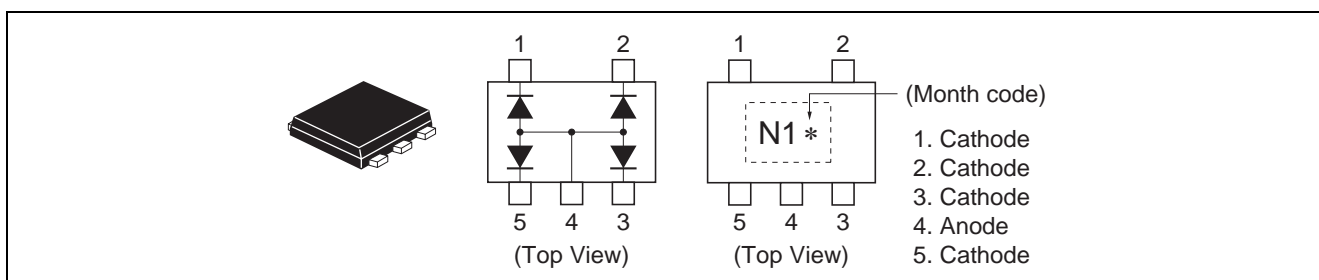
Features

- RKZ6.8Z4KT can absorbing surge with four devices in one chip configuration.
- Low capacitance (C = 4.0 pF Typ) enable protecting signal line from ESD.
- VSON-5 Package is suitable for high density surface mounting.

Ordering Information

Part No	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKZ6.8Z4KT H RKZ6.8Z4KT P	N1	VSON-5	PUSN0005KB-A	H (3,000 pcs / reel) P (3,000 pcs / reel)

Pin Arrangement



Month Code

Month of Manufacture	Assemble
	MALAYSIA
January	1
February	2
March	3
April	4
May	5
June	6

Month of Manufacture	Assemble
	MALAYSIA
July	7
August	8
September	9
October	W
November	X
December	Y

Absolute Maximum Ratings

(Ta = 25°C)

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

Note: Four devices total, See Fig.2.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	Vz	6.47	—	7.00	V	Iz = 5 mA, 40 ms pulse
Reverse current	IR1	—	—	2	nA	VR = 3.5 V
Capacitance	C	—	4.0	4.5	pF	VR = 0 V, f = 1 MHz
Dynamic resistance	rd	—	—	30	Ω	Iz = 5 mA
ESD-Capability *2, *3	—	8	—	—	kV	C = 150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse

Notes: 1. Per one device.

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

3. Between cathode and anode.

Main Characteristics

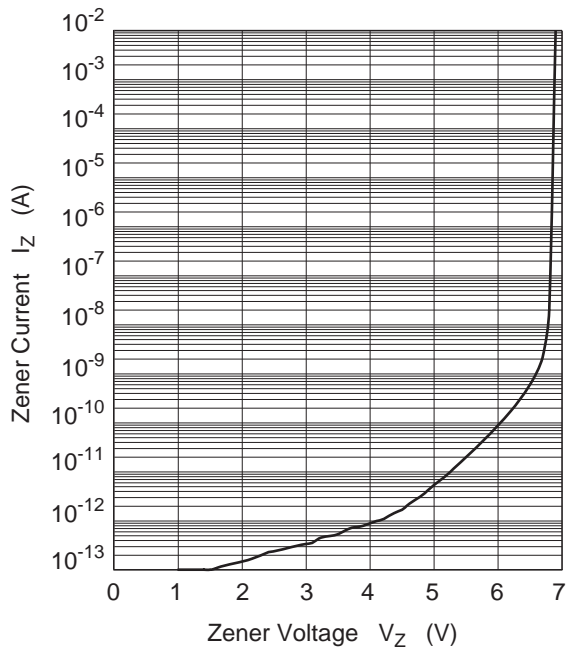


Fig.1 Zener current vs. Zener voltage

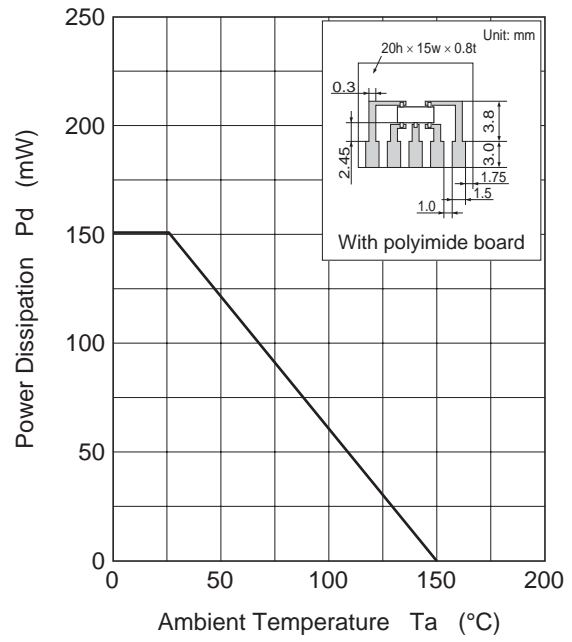


Fig.2 Power Dissipation vs. Ambient Temperature

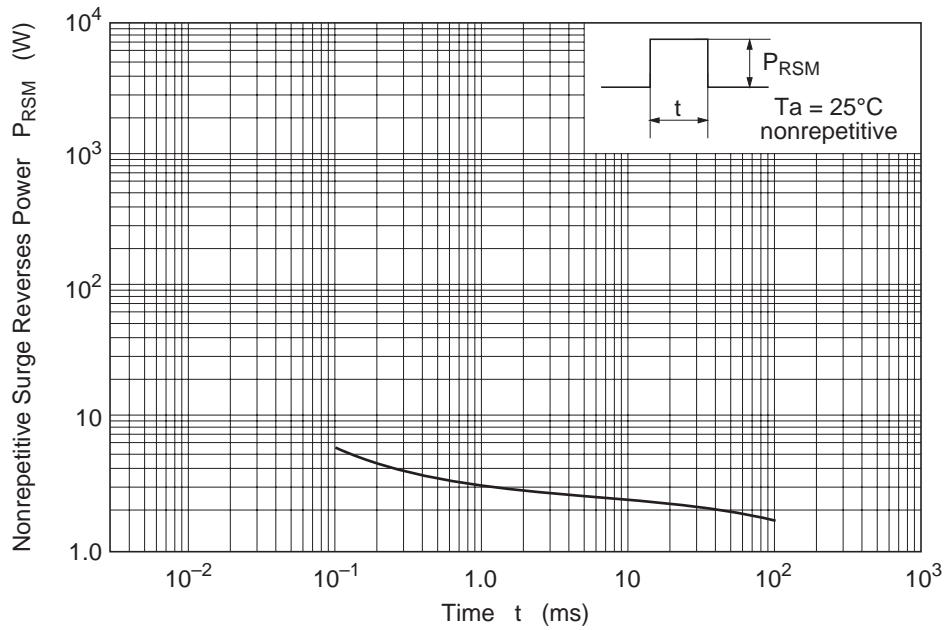
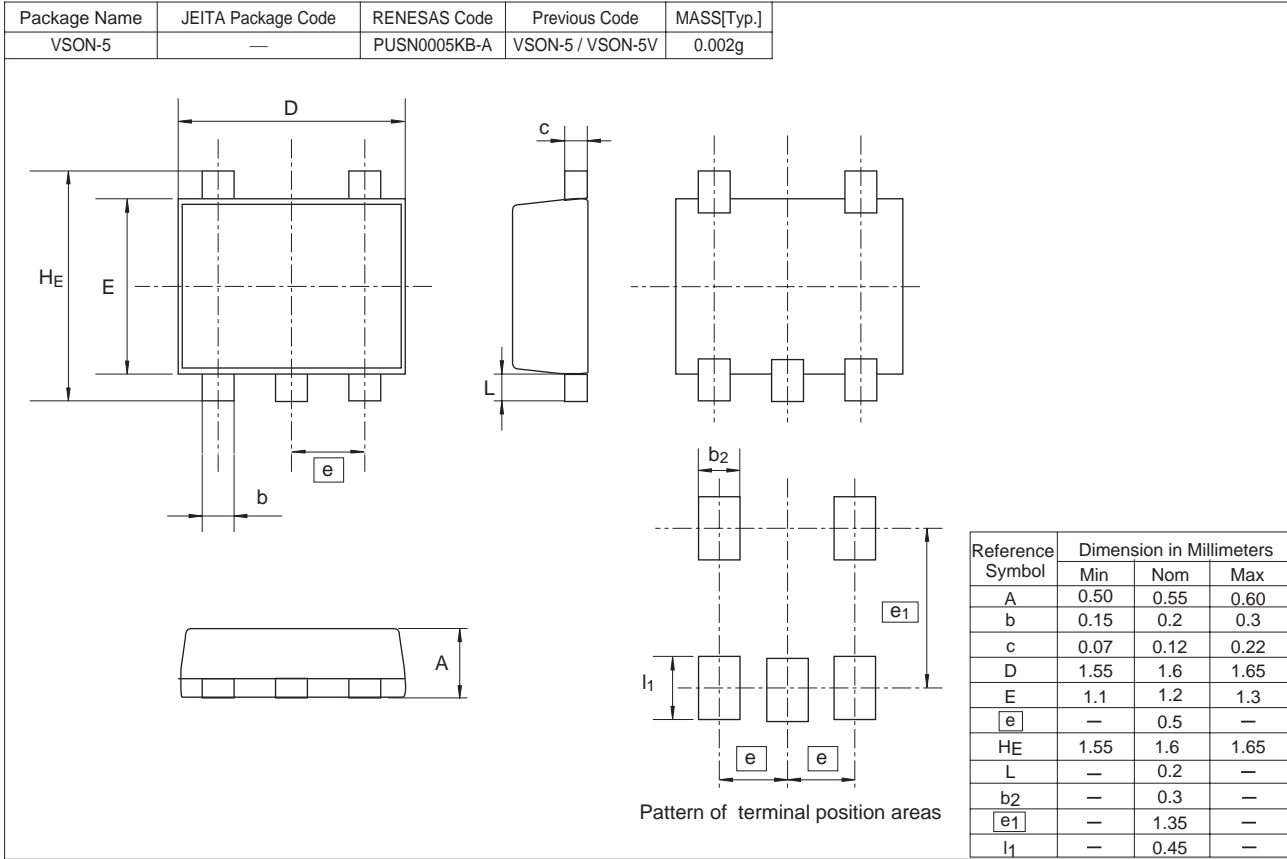


Fig.3 Surge Reverse Power Ratings

Package Dimensions



Notes:

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Renesas Technology America, Inc.
450 Holger Way, San Jose, CA 95134-1368, U.S.A
Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

Renesas Technology Europe Limited
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
Tel: <44> (1628) 585-100, Fax: <44> (1628) 585-900

Renesas Technology (Shanghai) Co., Ltd.
Unit 204, 205, AZIA Center, No.1233 Lujiazui Ring Rd, Pudong District, Shanghai, China 200120
Tel: <86> (21) 5877-1818, Fax: <86> (21) 6887-7858/7898

Renesas Technology Hong Kong Ltd.
7th Floor, North Tower, World Finance Centre, Harbour City, Canton Road, Tsimshatsui, Kowloon, Hong Kong
Tel: <852> 2265-6688, Fax: <852> 2377-3473

Renesas Technology Taiwan Co., Ltd.
10th Floor, No.99, Fushing North Road, Taipei, Taiwan
Tel: <886> (2) 2715-2888, Fax: <886> (2) 3518-3399

Renesas Technology Singapore Pte. Ltd.
1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632
Tel: <65> 6213-0200, Fax: <65> 6278-8001

Renesas Technology Korea Co., Ltd.
Kukje Center Bldg. 18th Fl., 191, 2-ka, Hangang-ro, Yongsan-ku, Seoul 140-702, Korea
Tel: <82> (2) 796-3115, Fax: <82> (2) 796-2145

Renesas Technology Malaysia Sdn. Bhd
Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No.18, Jln Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia
Tel: <603> 7955-9390, Fax: <603> 7955-9510