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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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RKZ7.5Z4MFAKT

Silicon Planar Zener Diode for Surge Absorption

REJ03G1854-0100
Rev.1.00
Feb 18, 2010

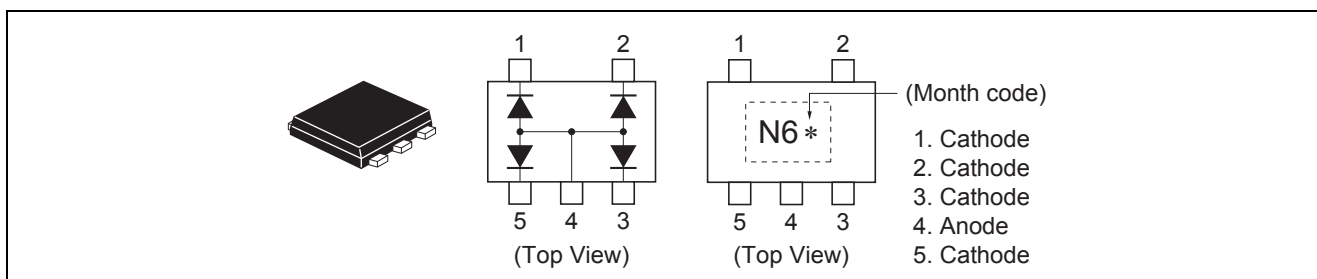
Features

- RKZ7.5Z4MFAKT has four devices in a monolithic, and can absorb surge.
- Low capacitance ($C = 4.0 \text{ pF Typ}$) and can protect ESD of signal line.
- VSON-5 Package is suitable for high density surface mounting.

Ordering Information

Part No	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKZ7.5Z4MFAKT H	N6	VSON-5	PUSN0005KB-A	H (3,000 pcs / reel)
RKZ7.5Z4MFAKT P				P (3,000 pcs / reel)

Pin Arrangement



Month Code

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

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

Absolute Maximum Ratings *1

(Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd *2	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

- Notes: 1. Per one device.
 2. Four device total, See Fig.2.

Electrical Characteristics *1

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V _Z	7.00	—	7.80	V	I _Z = 5 mA, 40 ms pulse
Reverse current	I _R	—	—	2	μA	V _R = 4.0 V
Capacitance	C	—	4.0	4.5	pF	V _R = 0V, f = 1 MHz
Dynamic resistance	r _d	—	—	30	Ω	I _Z = 5 mA
ESD-Capability *2	—	8	—	—	kV	C = 150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse

- Notes: 1. Per one device.
 2. Failure criterion; I_R > 2 μA at V_R = 4.0 V.

Main Characteristics

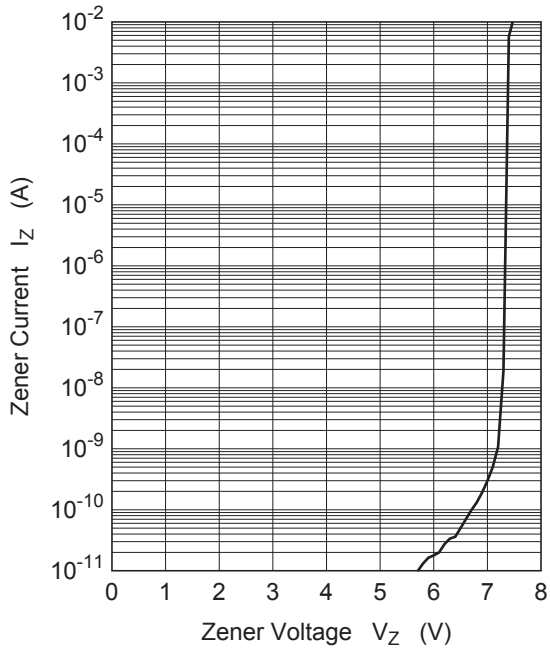


Fig.1 Zener current vs. Zener voltage

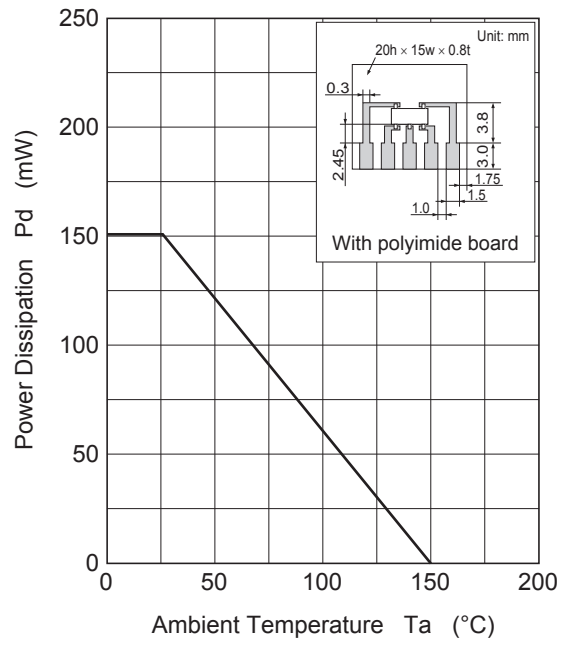


Fig.2 Power Dissipation vs. Ambient Temperature

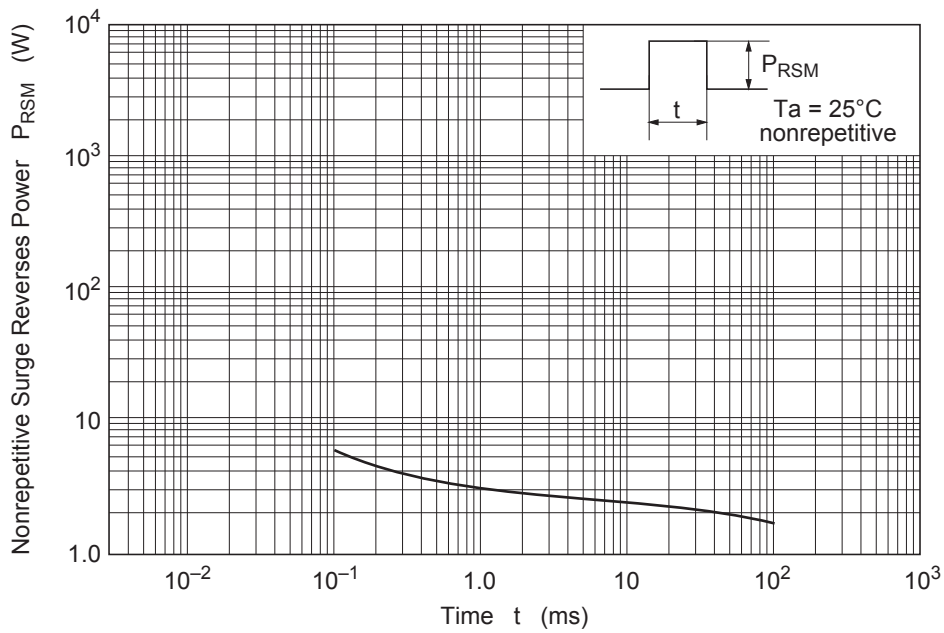
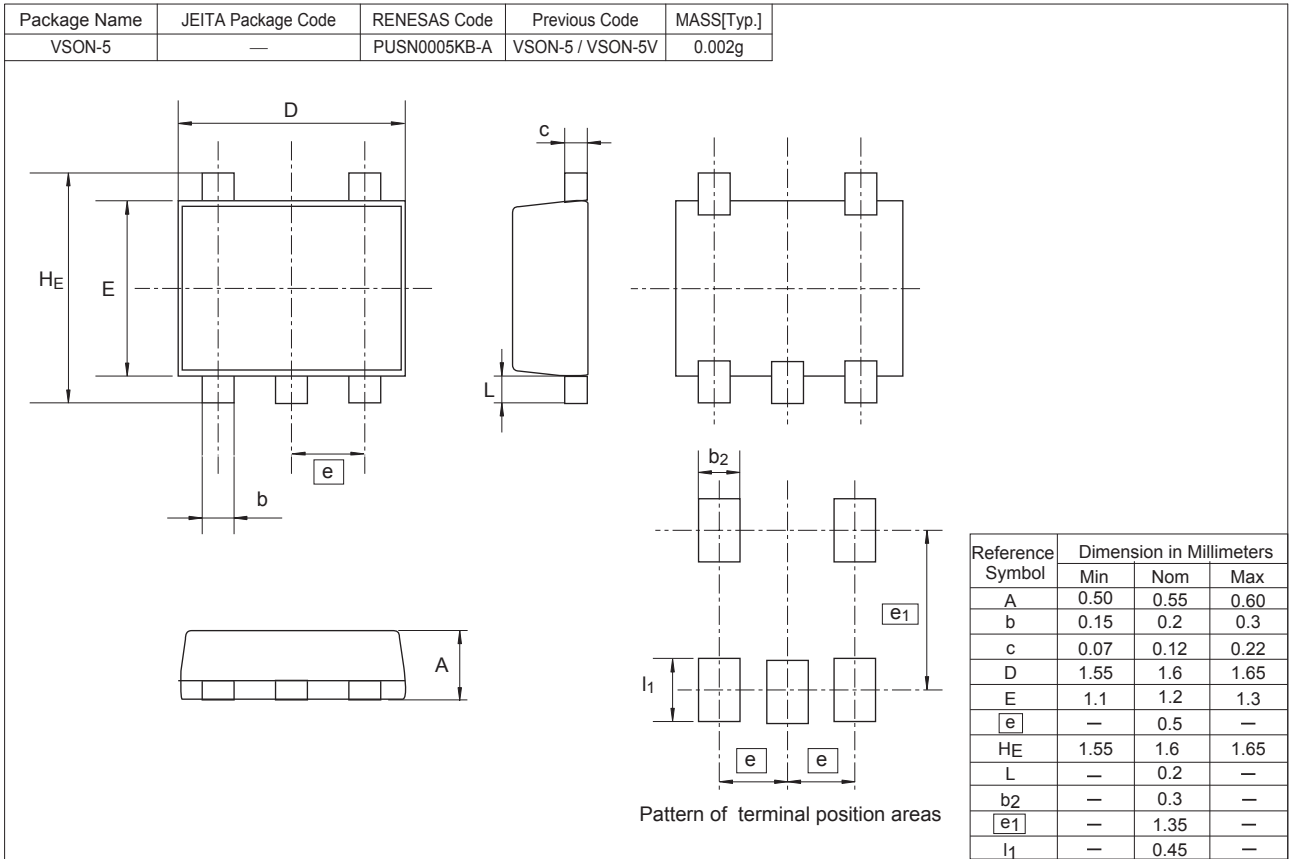


Fig.3 Surge Reverse Power Ratings

Package Dimensions



Notes:

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