

RKZ6.8ZMFAKT

Silicon Planar Zener Diode for Surge Absorption

REJ03G1350-0100
Rev.1.00
Feb 22, 2006

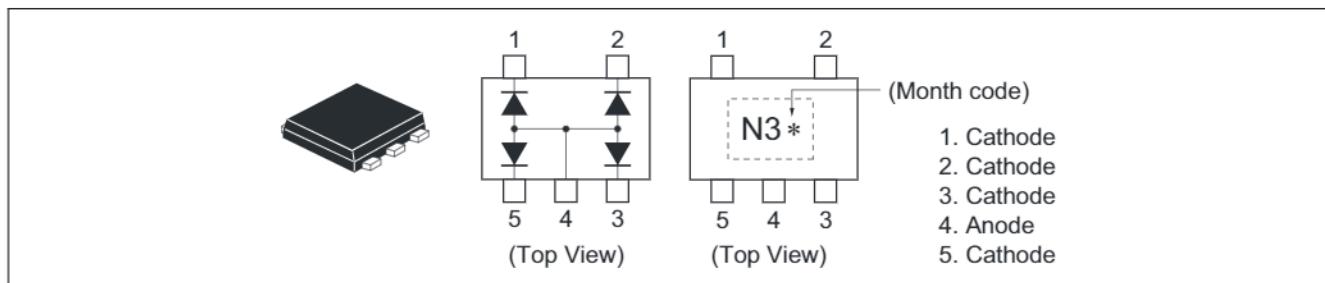
Features

- RKZ6.8ZMFAKT has four devices in a monolithic, and can absorb surge.
- VSON-5 Package is suitable for high density surface mounting.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code
RKZ6.8ZMFAKT	N3	VSON-5	PUSN0005ZB-A

Pin Arrangement



Month Code

Month of Manufacture	Assemble	
	JAPAN	MALAYSIA
January	A	1
February	B	2
March	C	3
April	D	4
May	E	5
June	F	6

Month of Manufacture	Assemble	
	JAPAN	MALAYSIA
July	G	7
August	H	8
September	J	9
October	K	W
November	L	X
December	M	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 device total, See Fig.2.

Electrical Characteristics *¹

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V _Z	6.47	—	7.00	V	I _Z = 5 mA, 40 ms pulse
Reverse current	I _R	—	—	0.5	mA	V _R = 3.5 V
Capacitance	C	—	—	25	pF	V _R = 0 V, f = 1 MHz
Dynamic resistance	r _d	—	—	30	Ω	I _Z = 5 mA
ESD-Capability * ^{2, *³}	—	25	—	—	kV	C = 150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse

Notes: 1. Per one device.
 2. Failure criterion ; I_R > 0.5 mA at V_R = 3.5 V.
 3. Between cathode and anode.

Main Characteristic

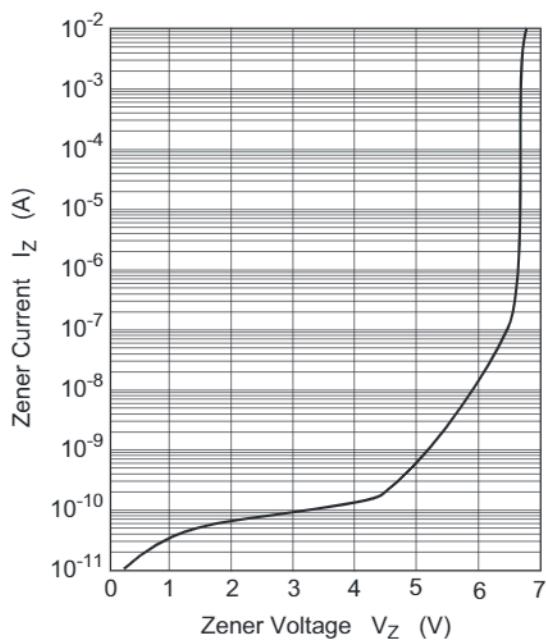


Fig.1 Zener current vs. Zener voltage

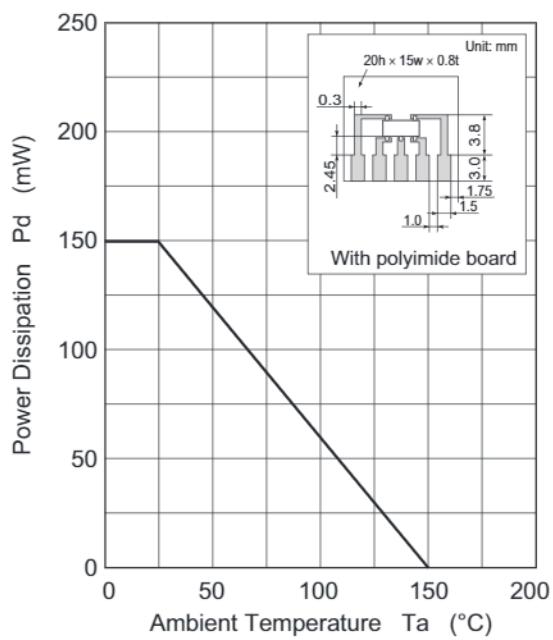


Fig.2 Power Dissipation vs. Ambient Temperature

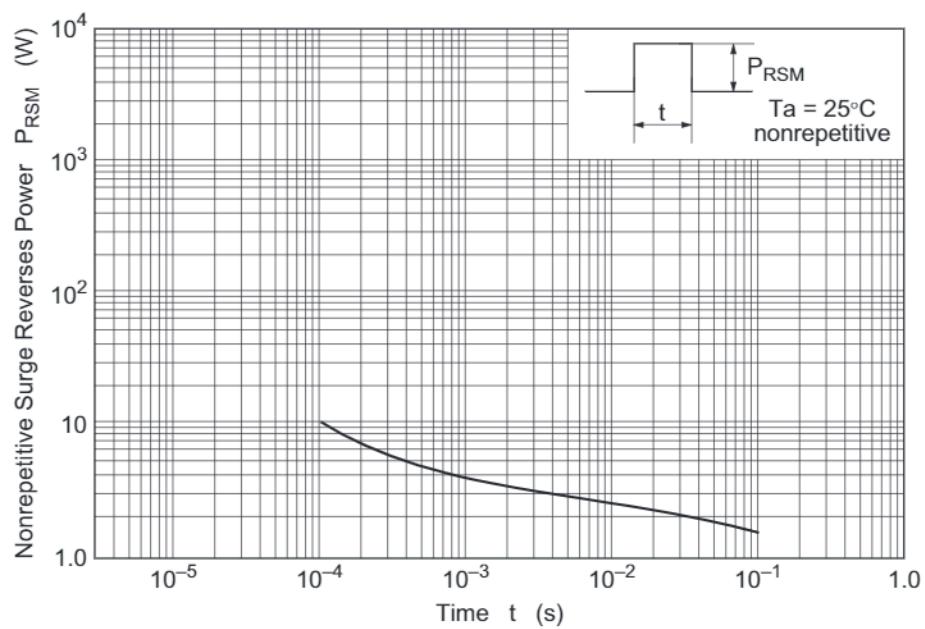


Fig.3 Surge Reverse Power Ratings

Main Characteristic (cont.)

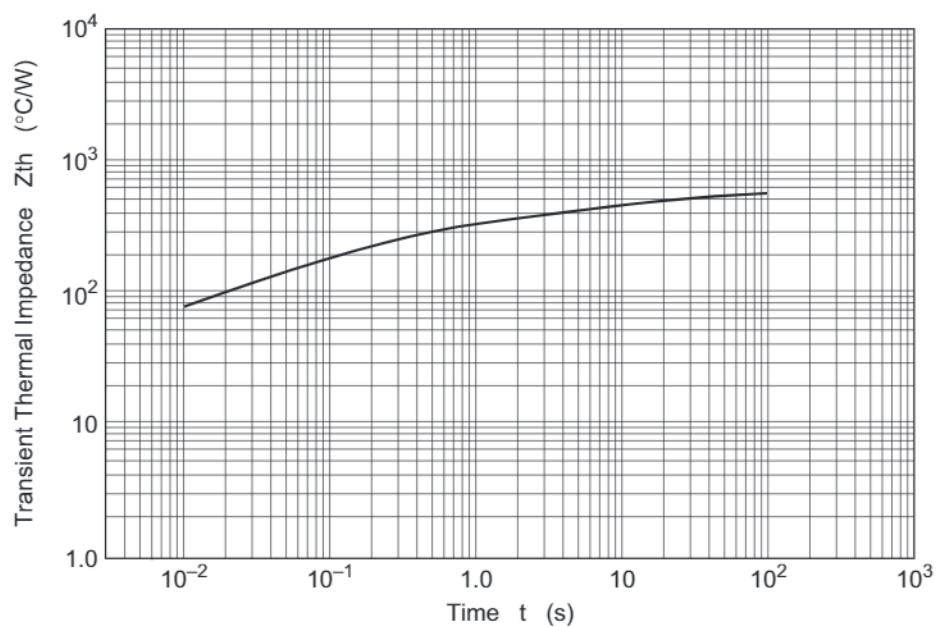


Fig.4 Transient Thermal Impedance

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
VSON-5	—	PUSN0005KB-A	VSON-5 / VSON-5V	0.002g

Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.50	0.55	0.60
b	0.15	0.2	0.3
c	0.07	0.12	0.22
D	1.55	1.6	1.65
E	1.1	1.2	1.3
e	—	0.5	—
H_E	1.55	1.6	1.65
L	—	0.2	—
b2	—	0.3	—
e1	—	1.35	—
l1	—	0.45	—

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