HZM6.8ZMWA

Silicon Planar Zener Diode for Surge Absorb

REJ03G1212-0200
(Previous: ADE-208-822A)
Rev.2.00
Jun 14, 2005

Features

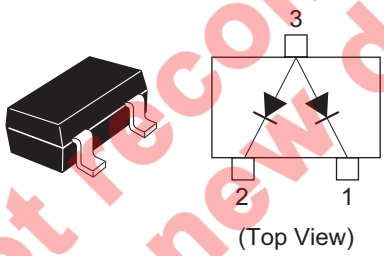
- HZM6.8ZMWA has two devices in a monolithic, and can absorb surge.
- Low capacitance (C = 25 pF max) and can protect ESD of signal line.
- MPAK Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HZM6.8ZMWA	68N	MPAK	PLSP0003ZC-A (MPAK)

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Pin Arrangement



(Top View)

1. Cathode
2. Cathode
3. Anode

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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. Two 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	—	7.0	V	I_Z = 5 mA, 40 ms pulse
Reverse current	I_R	—	—	2	μA	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]	—	20	—	—	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 = 3.5 V.

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Main Characteristic

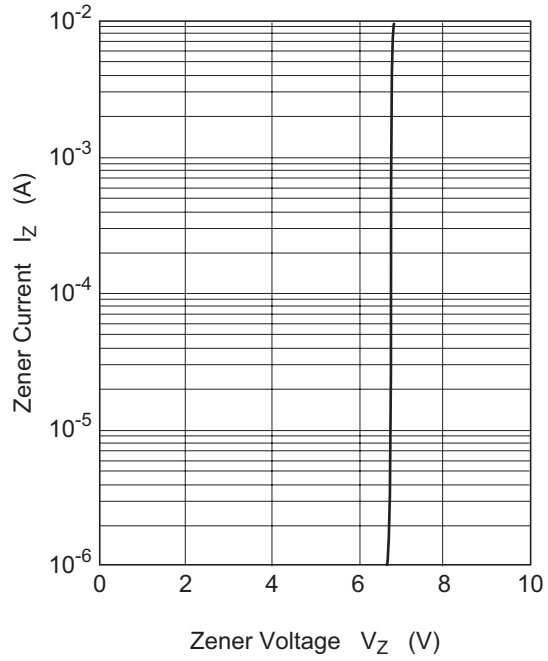


Fig.1 Zener current vs. Zener voltage

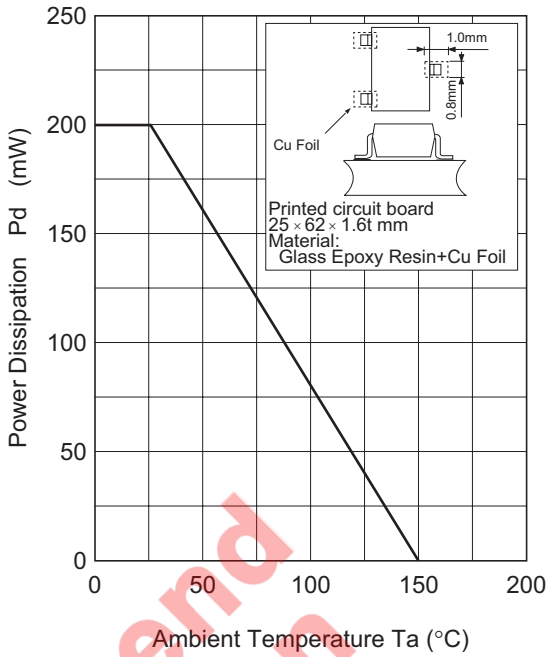


Fig.2 Power Dissipation vs. Ambient Temperature

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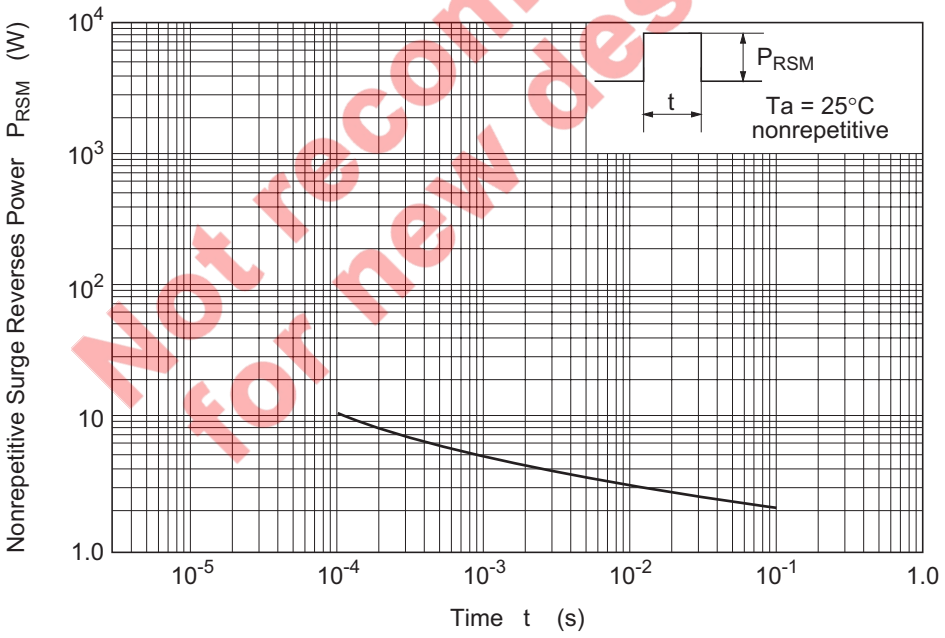


Fig.3 Surge Reverse Power Ratings

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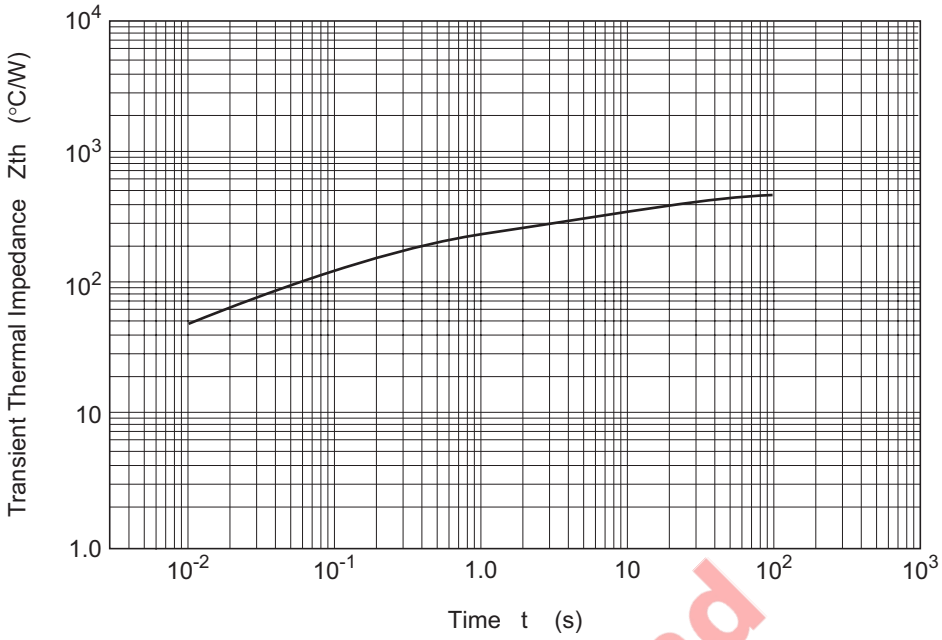


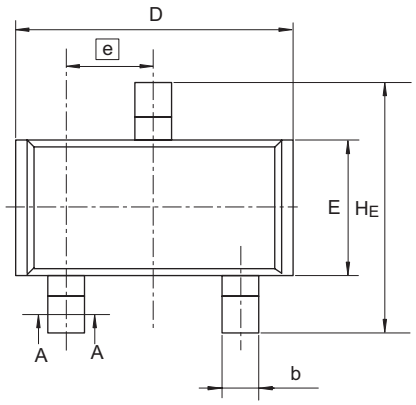
Fig.4 Transient Thermal Impedance

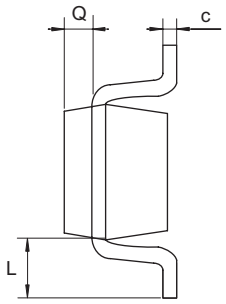
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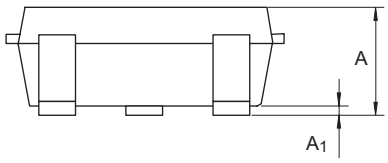
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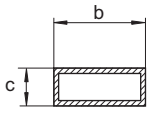
Package Dimensions

JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
SC-59A	PLSP0003ZC-A	MPAK(D) / MPAK(D)V	0.011g

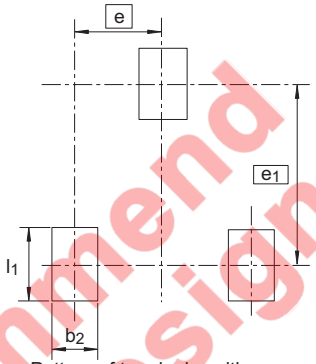








A — A Section



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	1.0	-	1.3
A_1	0	-	0.1
b	0.35	0.4	0.5
c	0.1	0.16	0.26
D	2.7	-	3.1
E	1.35	1.5	1.65
e	-	0.95	-
H_E	2.2	2.8	3.0
L	-	0.65	-
b_2	-	-	0.55
e_1	-	1.95	-
l_1	-	-	1.05
Q	-	0.3	-

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