HZM6.8ZMFA

Silicon Planar Zener Diode for Surge Absorb

REJ03G1211-0300
(Previous: ADE-208-783B)
Rev.3.00
Jun 14, 2005

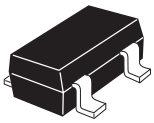
Features

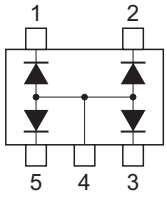
- HZM6.8ZMFA has four devices in a monolithic, and can absorb surge.
- Low capacitance (C = 25 pF max) and can protect ESD of signal line.
- MPAK-5 Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HZM6.8ZMFA	68N	MPAK-5	PLSP0005ZC-A (MPAK-5)

Pin Arrangement





(Top View)

1. Cathode
2. Cathode
3. Cathode
4. Anode
5. Cathode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd *	200	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	—	—	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	—	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 > 2 μA at V_R = 3.5 V.

Main Characteristic

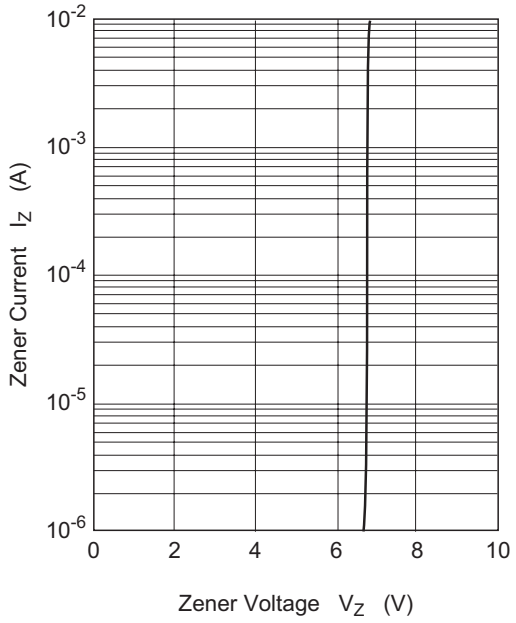


Fig.1 Zener current vs. Zener voltage

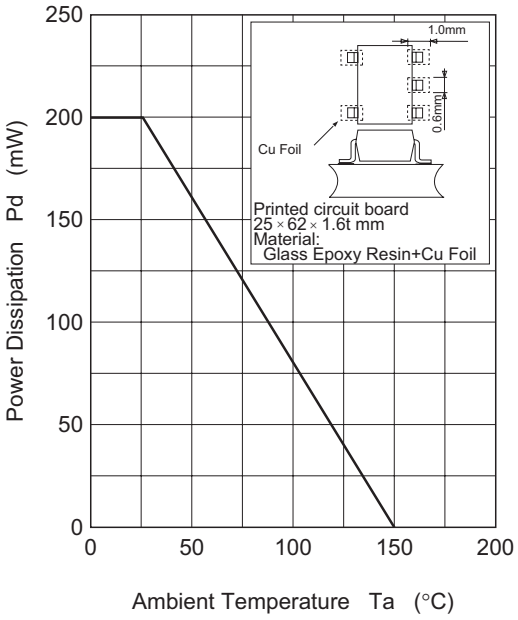


Fig.2 Power Dissipation vs. Ambient Temperature

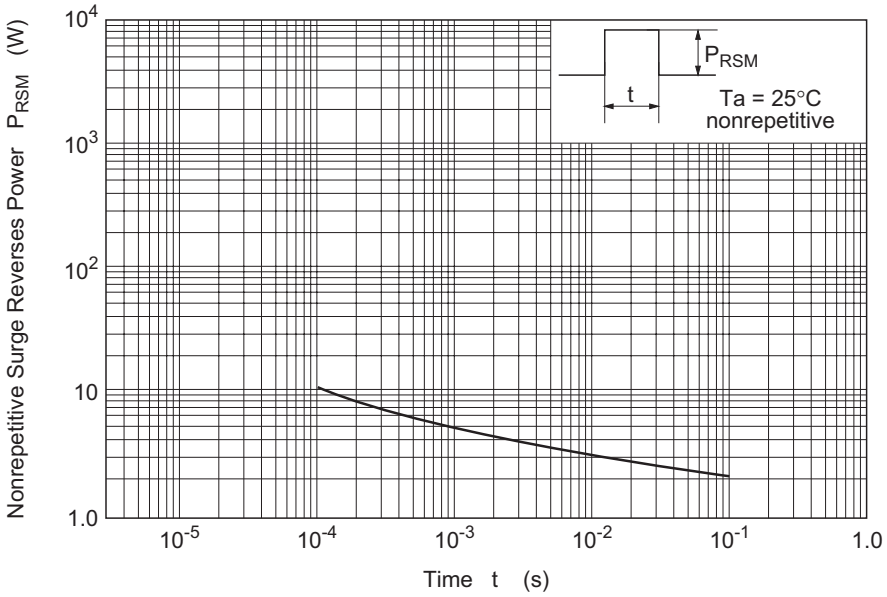


Fig.3 Surge Reverse Power Ratings

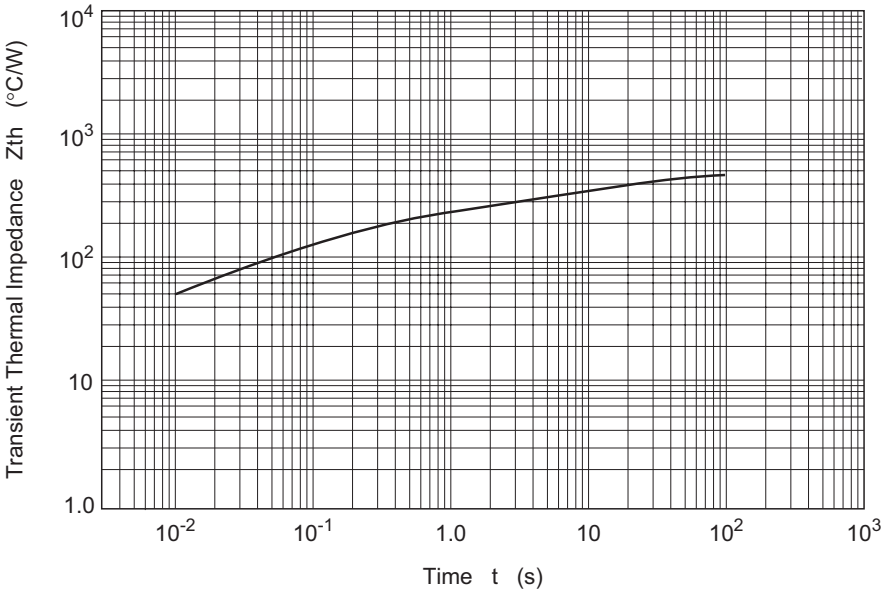
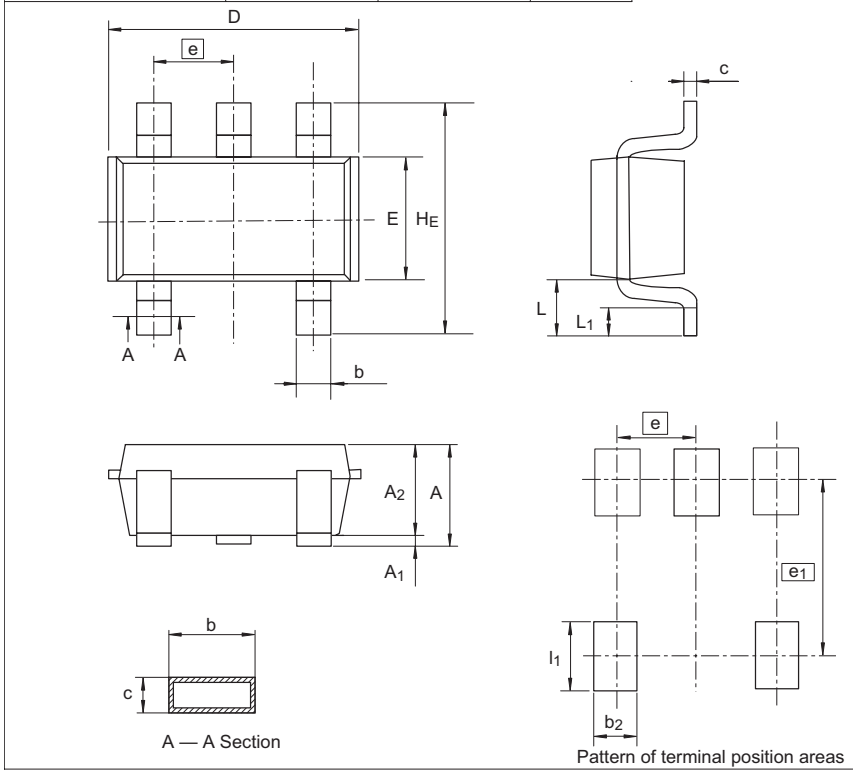


Fig.4 Transient Thermal Impedance

Package Dimensions

JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
SC-74A	PLSP0005ZC-A	MPAK-5 / MPAK-5V	0.013g



Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	1.0	-	1.4
A_1	0	-	0.1
A_2	1.0	1.1	1.3
b	0.3	0.4	0.5
c	0.11	0.16	0.26
D	2.7	2.9	3.1
E	1.5	1.6	1.8
e	-	0.95	-
H_E	2.5	2.8	3.0
L	-	0.6	-
L_1	0.15	-	-
b_2	-	-	0.55
e_1	-	2.15	-
l_1	-	-	0.85

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