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April 1st, 2010
Renesas Electronics Corporation

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

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for new design

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HZM5.6ZFA

Silicon Epitaxial Planar Zener Diode for Surge Absorb

REJ03G1206-0300
 (Previous: ADE-208-796B)
 Rev.3.00
 Jun 03, 2005

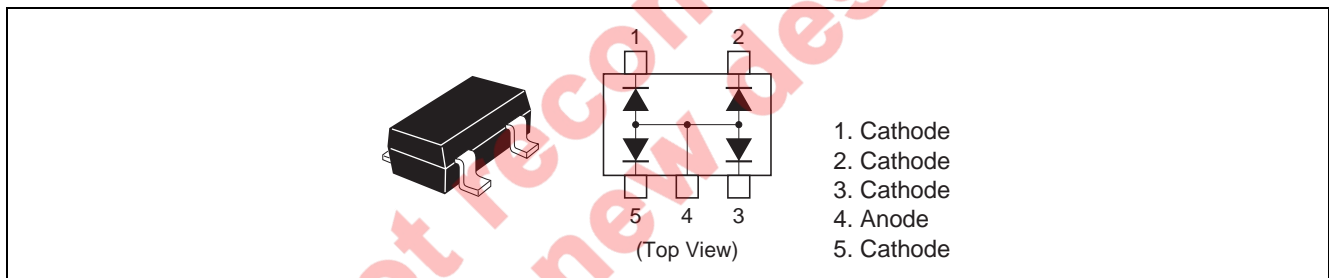
Features

- HZM5.6ZFA has four devices, and can absorb surge.
- Low capacitance ($C = 8.5 \text{ pF max}$) 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)
HM5.6ZFA	56Z	MPAK-5	PLSP0005ZC-A (MPAK-5)

Pin Arrangement



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	5.31	—	5.92	V	I _Z = 5 mA, 40 ms pulse
Reverse current	I _R	—	—	0.5	μA	V _R = 2.5 V
Capacitance	C	—	8.0	8.5	pF	V _R = 0 V, f = 1 MHz
Dynamic resistance	r _d	—	—	80	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 > 0.5 μA at V_R = 2.5 V.

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Main Characteristic

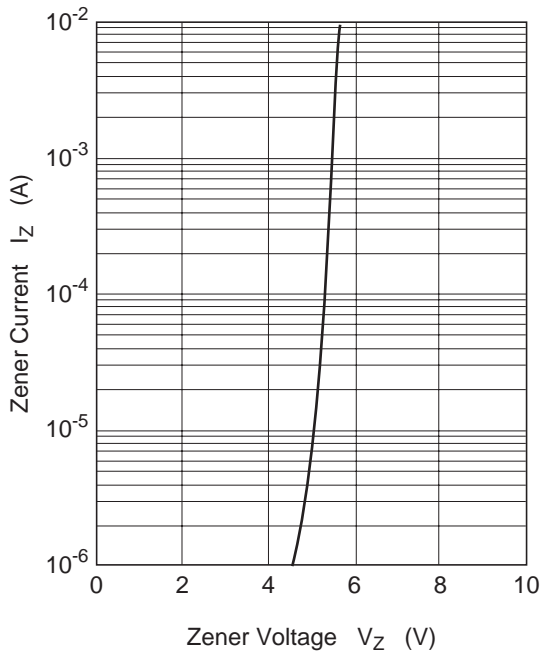


Fig.1 Zener current vs. Zener voltage

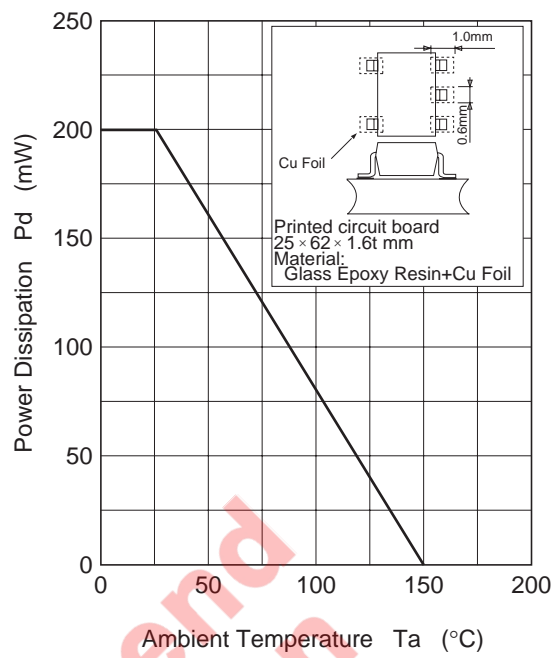


Fig.2 Power Dissipation vs. Ambient Temperature

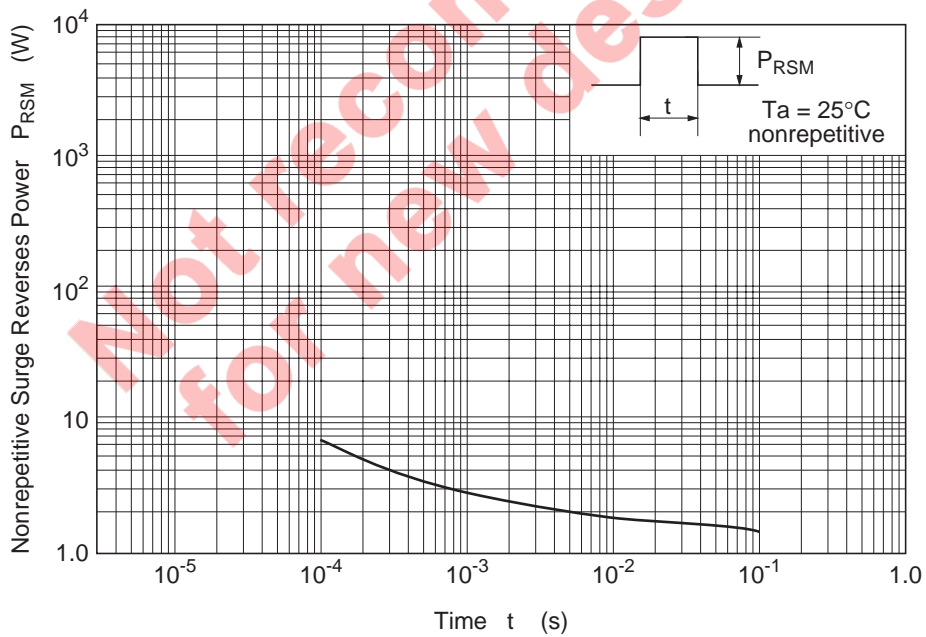


Fig.3 Surge Reverse Power Ratings

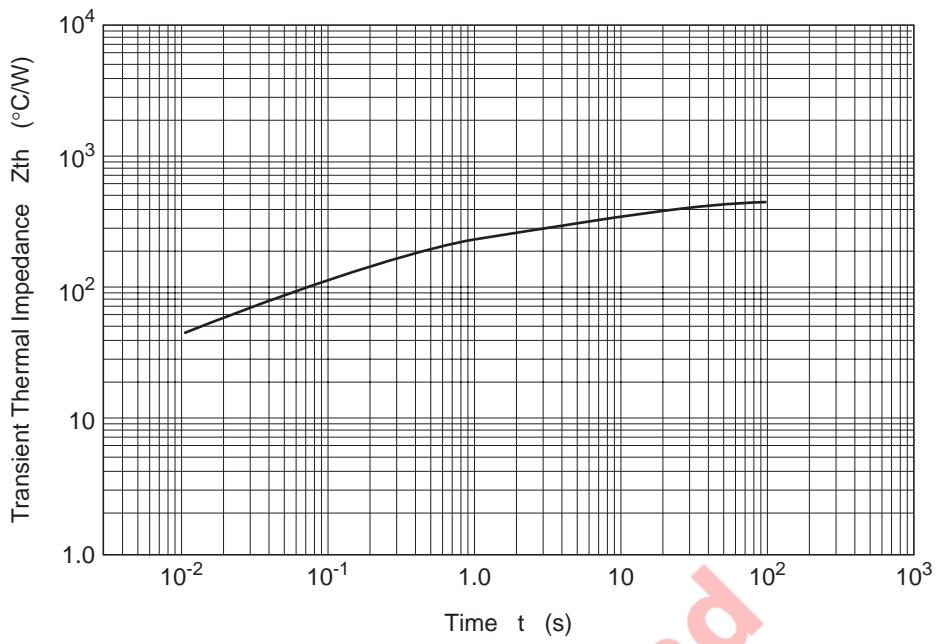
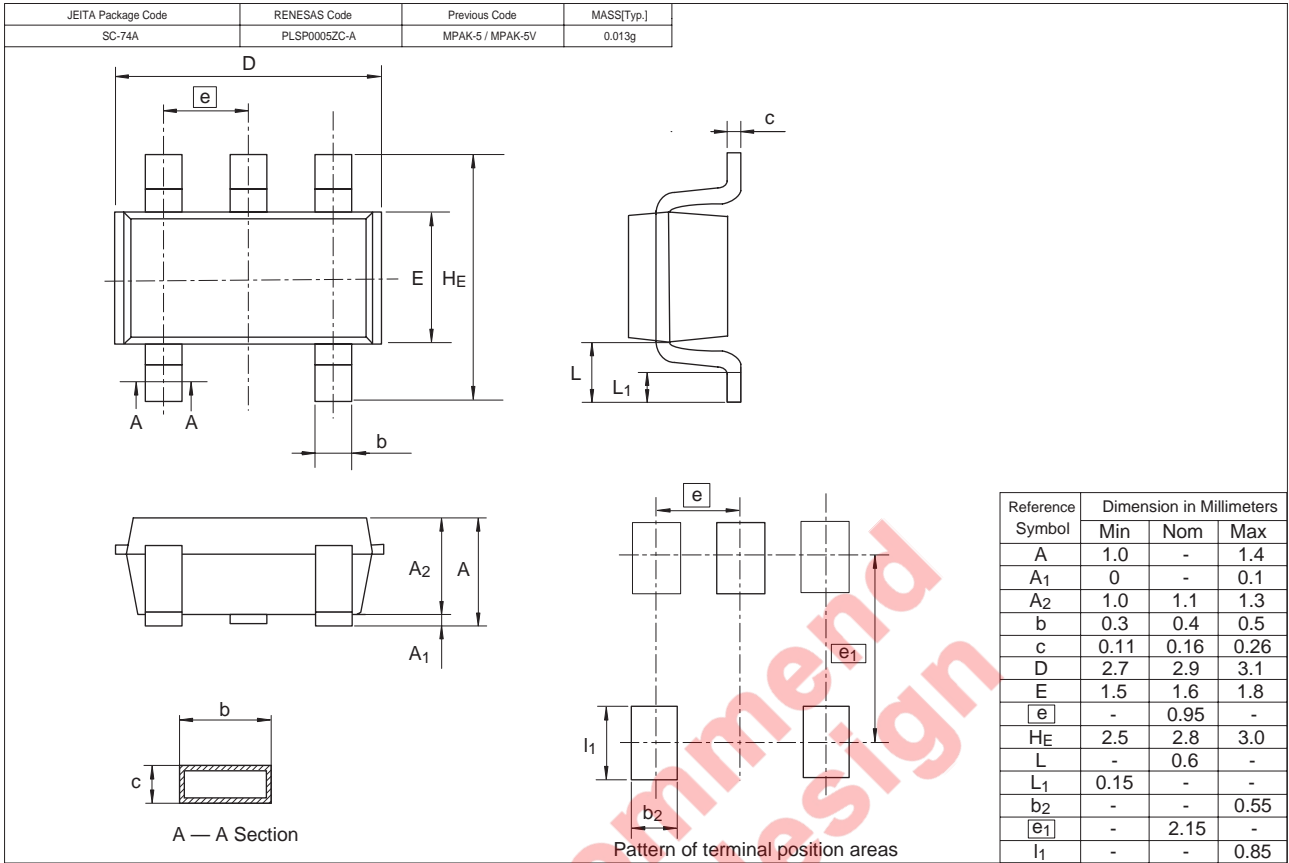


Fig.4 Transient Thermal Impedance

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Package Dimensions



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