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April 1st, 2010
Renesas Electronics Corporation

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

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HZD6.8Z4

Silicon Planar Zener Diode for Surge Absorb

REJ03G0201-0200
Rev.2.00
Oct 20, 2004

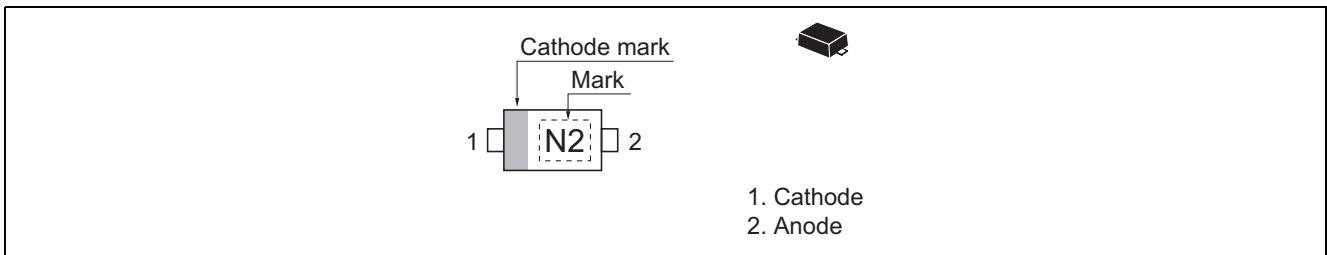
Features

- Low capacitance ($C = 4.0 \text{ pF max}$) and can protect ESD of signal line.
- Super small Flat Package (SFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HZD6.8Z4	N2	SFP

Pin Arrangement



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: See Fig.2.

Electrical Characteristics

(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	—	—	4	pF	V _R = 1 V, f = 1 MHz
Dynamic resistance	r _d	—	—	30	Ω	I _Z = 5 mA
ESD-Capability *1*2	—	8	—	—	kV	C = 150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse

Notes: 1. Failure criterion ; I_R > 2 μA at V_R = 3.5 V.

2. Between cathode and anode.

3. Please do not use the soldering iron due to avoid high stress to the SFP package.

Main Characteristic

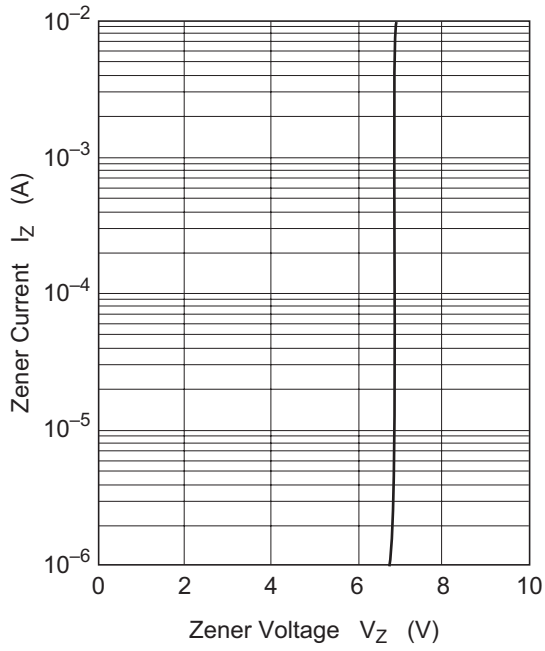


Fig.1 Zener current vs. Zener voltage

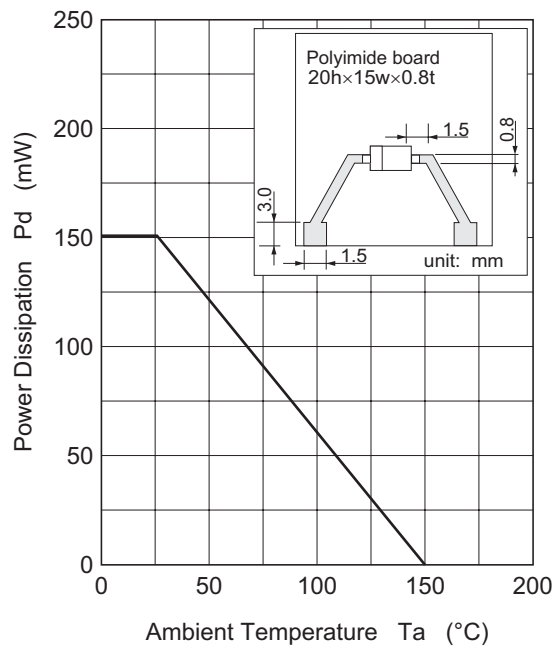


Fig.2 Power Dissipation vs. Ambient Temperature

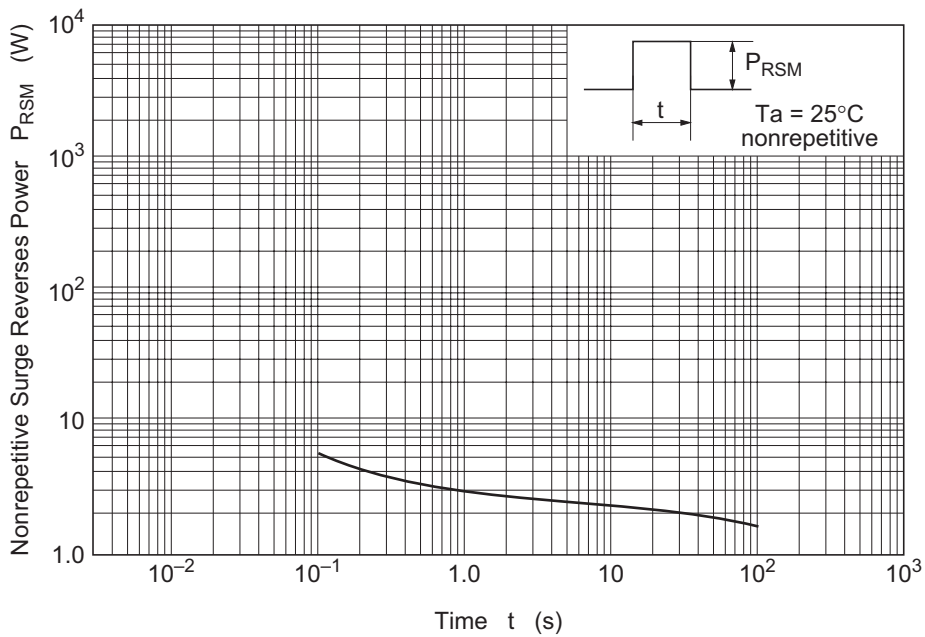
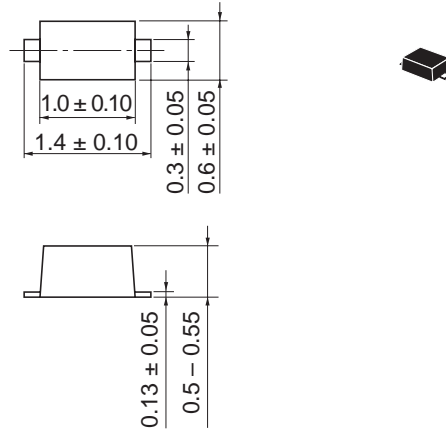


Fig.3 Surge Reverse Power Ratings

Package Dimensions

As of January, 2003
Unit: mm



Package Code	SFP
JEDEC	—
JEITA	—
Mass (reference value)	0.0010 g

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