HZL6.8Z4

Silicon Planar Zener Diode for Surge Absorb

REJ03G0410-0100
Rev.1.00
Oct 01, 2004

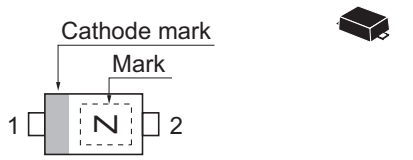
Features

- Low capacitance (C = 4.0 pF max) and can protect ESD of signal line.
- Extremely small Flat Package (EFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HZL6.8Z4	Z	EFP

Pin Arrangement



1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd *	100	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	—	—	4.0	pF	V_R = 0 V, f = 1 MHz
Dynamic resistance	r_d	—	—	30	Ω	I_Z = 5 mA
ESD-Capability *[1]	—	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. Please do not use the soldering iron due to avoid high stress to the EFP package.
3. The material of lead is exposed for cutting plane. There for, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

Main Characteristic

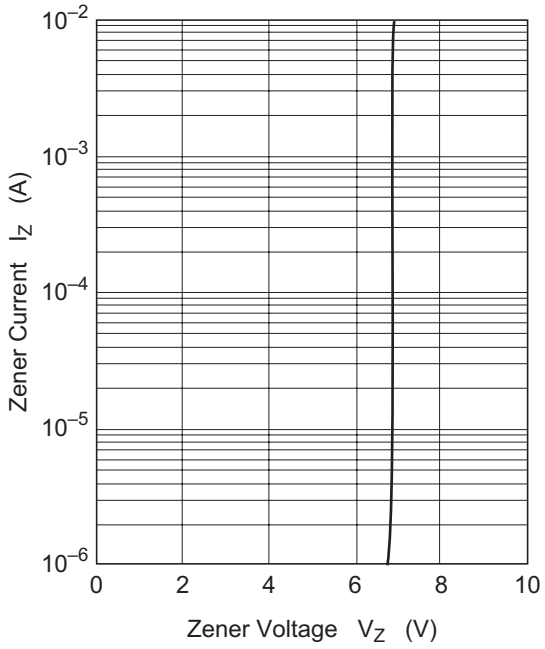


Fig.1 Zener current vs. Zener voltage

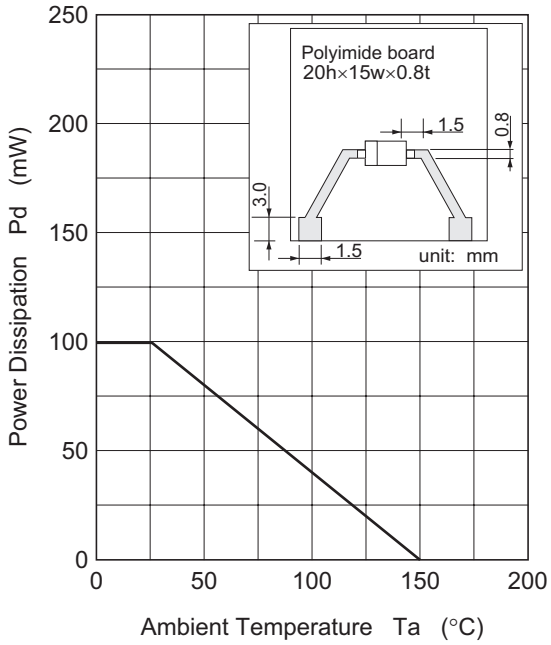


Fig.2 Power Dissipation vs. Ambient Temperature

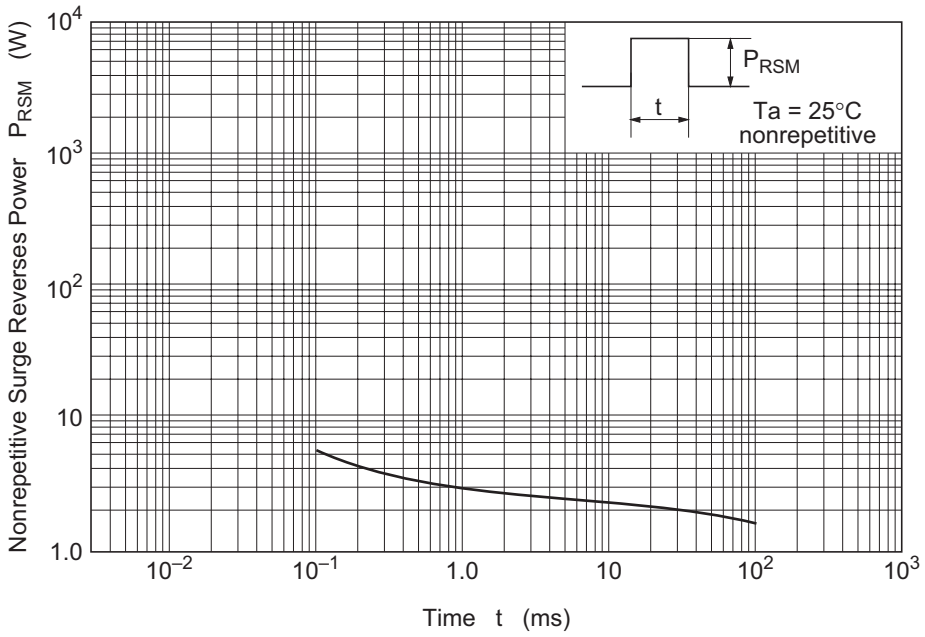
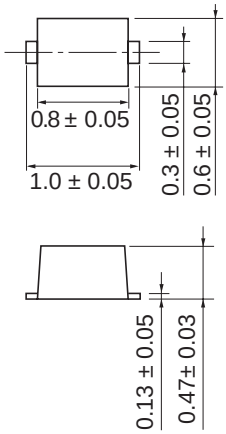


Fig.3 Surge Reverse Power Ratings

Package Dimensions

As of January, 2003

Unit: mm



Package Code	EFP
JEDEC	—
JEITA	—
Mass (reference value)	0.0007 g

Renesas Technology Corp. Sales Strategic Planning Div. Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

RENESAS SALES OFFICES

http://www.renesas.com

Refer to "**http://www.renesas.com/en/network**" for the latest and detailed information.

Renesas Technology America, Inc.
450 Holger Way, San Jose, CA 95134-1368, U.S.A
Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

Renesas Technology Europe Limited
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
Tel: <44> (1628) 585-100, Fax: <44> (1628) 585-900

Renesas Technology Hong Kong Ltd.
7th Floor, North Tower, World Finance Centre, Harbour City, 1 Canton Road, Tsimshatsui, Kowloon, Hong Kong
Tel: <852> 2265-6688, Fax: <852> 2730-6071

Renesas Technology Taiwan Co., Ltd.
10th Floor, No.99, Fushing North Road, Taipei, Taiwan
Tel: <886> (2) 2715-2888, Fax: <886> (2) 2713-2999

Renesas Technology (Shanghai) Co., Ltd.
Unit2607 Ruijing Building, No.205 Maoming Road (S), Shanghai 200020, China
Tel: <86> (21) 6472-1001, Fax: <86> (21) 6415-2952

Renesas Technology Singapore Pte. Ltd.
1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632
Tel: <65> 6213-0200, Fax: <65> 6278-8001

Colophon .2.0