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April 1st, 2010
Renesas Electronics Corporation

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

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RKZ7.5TKL

Silicon Planar Zener Diode for Bi-directional Surge Absorption

REJ03G1850-0100

Rev.1.00

Feb 18, 2010

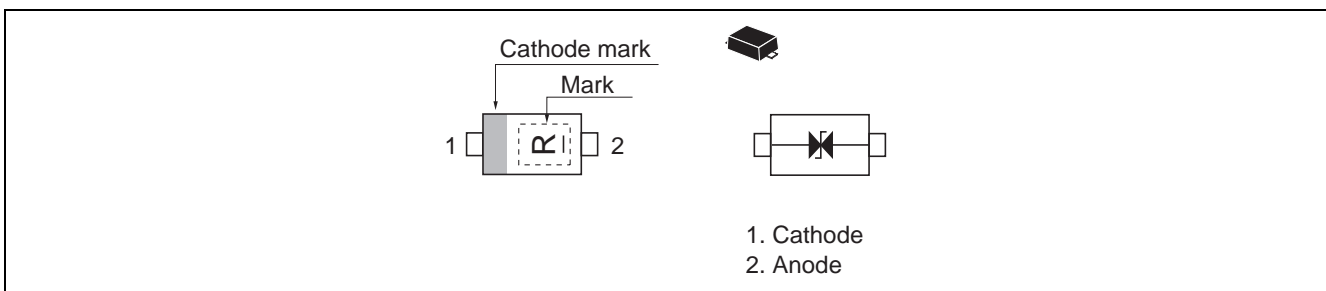
Features

- This product is for a Bi-directional zener diode so its possible to use for Bi-directional surge absorption.
- High ESD resistance (guarantee of 8 kV, compliant with the IEC61000-4-2 standard).
- Extremely small Flat Lead Package (EFP) is suitable for surface mount design.

Ordering Information

Part No	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKZ7.5TKL R	R	EFP	PXSF0002ZA-A	R (10,000 pcs / reel)

Pin Arrangement



Absolute Maximum Ratings ^{*1}

(Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd ^{*2}	100	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

- Notes: 1. Per Package
 2. See Fig.2.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Zener voltage	V _Z	6.0	—	9.0	V	I _Z = ±1 mA, 40 ms pulse
Reverse current	I _R	—	—	0.2	μA	V _R = ±4 V
Capacitance	C	—	—	12.0	pF	V _R = 0 V, f = 1 MHz
ESD-Capability ^{*1}	—	8	—	—	kV	C = 150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse

- Notes: 1. Failure criterion; I_R > 0.2 μA (V_R = 4 V (Both direction))
 2. In the EFP package, some lead is exposed because the tip of the lead is used as the cutting plane. Therefore, the solderability of the lead tip has ignored. Please test and confirm before use.

Main Characteristics

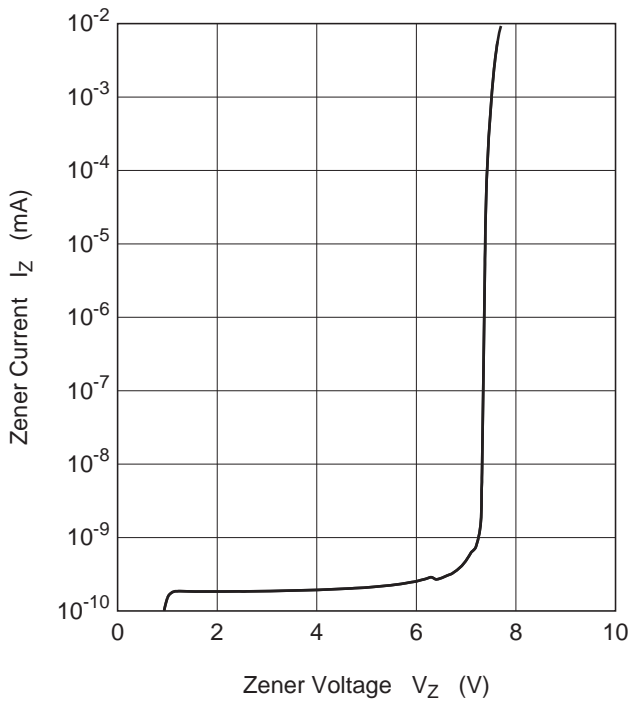


Fig.1 Zener current vs. Zener voltage

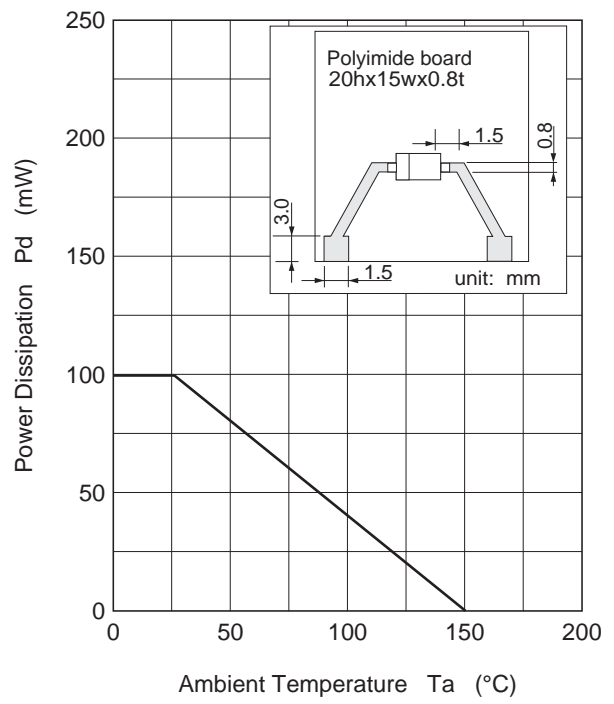


Fig.2 Power Dissipation vs. Ambient Temperature

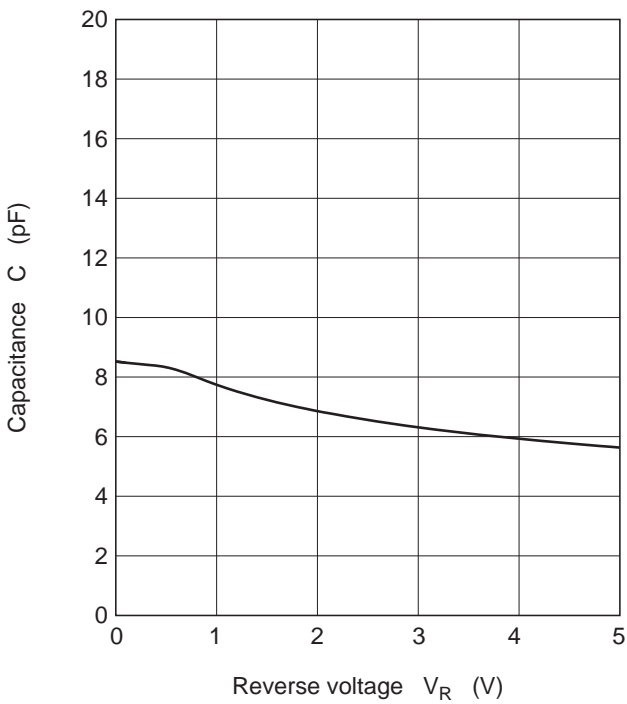
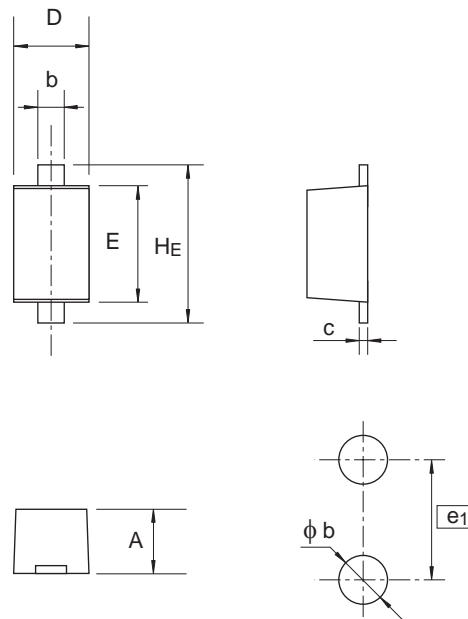


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
EFP	—	PXSF0002ZA-A	EFP / EFPV	0.0007g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.44	0.47	0.50
b	0.25	0.30	0.35
c	0.08	0.13	0.18
D	0.55	0.60	0.65
E	0.75	0.80	0.85
HE	0.95	1.00	1.05
phi b	—	0.40	—
e1	—	1.00	—

Notes:

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