

To our customers,

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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

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

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RKZ-KP Series

Silicon Planar Zener Diode for Surge Absorption

REJ03G1728-0100
Rev.1.00
Aug 04, 2008

Features

- High ESD-Capability 30 kV, human body model (IEC61000-4-2).
- Wide zener voltage range from 6.2 V through 8.2 V.
- Halogen free, Environmental friendly Package include Conformity to RoHS Directive.
- Ultra small Package (0.6mm × 0.3mm Size leadless type).

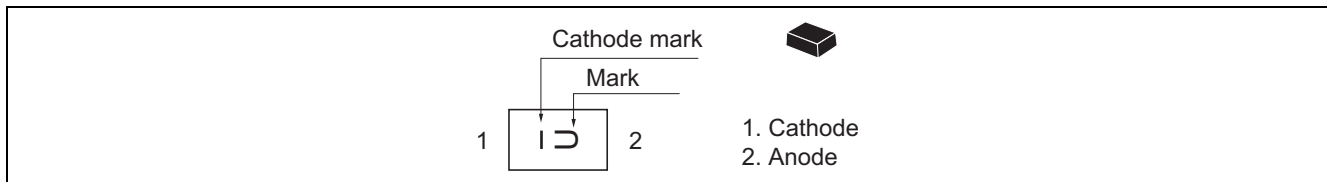
Ordering Information

Part No.	Laser Mark	Package Name	Package Code
RKZ-KP Series	Let to Mark Code	MP6	PXSN0002ZB-A

Mark Code

Part No.	Mark No.
RKZ6.2BKP	U
RKZ6.8BKP	V
RKZ8.2BKP	W

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd *1	100	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Note: 1. With P.C. Board.

Electrical Characteristics

(Ta = 25°C)

Part No.	Zener Voltage		Reverse Current		Dynamic Resistance		ESD-Capability	
	V _Z (V) *1		Test Condition	I _R (μA)	Test Condition	r _d (Ω)	Test Condition	(kV) *2
	Min	Max	I _Z (mA)	Max	V _R (V)	Max	I _Z (mA)	Min
RKZ6.2BKP	5.86	6.53	5	2	3.0	50	5	30
RKZ6.8BKP	6.47	7.14	5	2	3.5	30	5	30
RKZ8.2BKP	7.76	8.64	5	2	5.0	30	5	30

Notes: 1. Tested with pulse (Pw = 40 ms).

2. C =150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse
Failure criterion should according to IR spec .

3. Please do not use the soldering iron due to avoid high stress to the MP6 package.

Main Characteristic

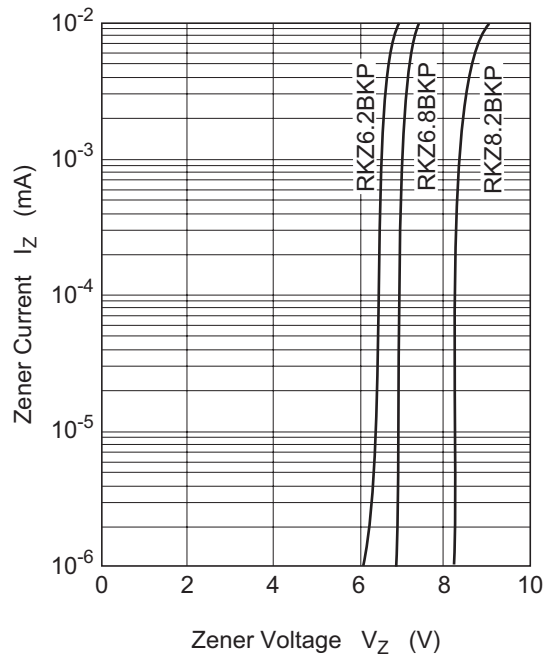


Fig.1 Zener current vs. Zener voltage

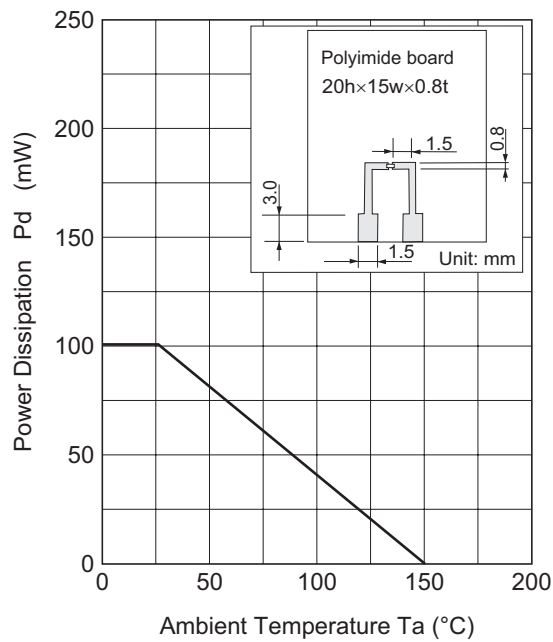
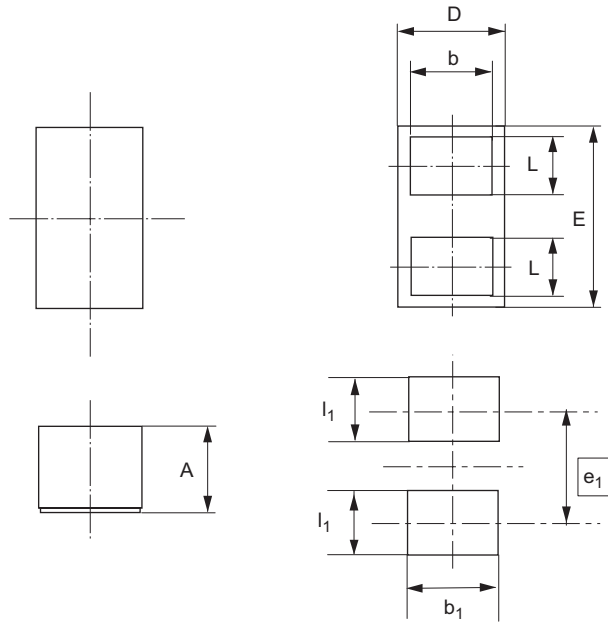


Fig.2 Power Dissipation vs. Ambient Temperature

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
MP6	—	PXSN0002ZB-A	MP6V	0.00015g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.27	0.30	0.33
b	0.25	0.27	0.29
D	0.29	0.32	0.35
E	0.59	0.62	0.65
L	0.17	0.19	0.21
b_1	—	0.31	—
e_1	—	0.38	—
l_1	—	0.23	—

Notes:

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