

# 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).

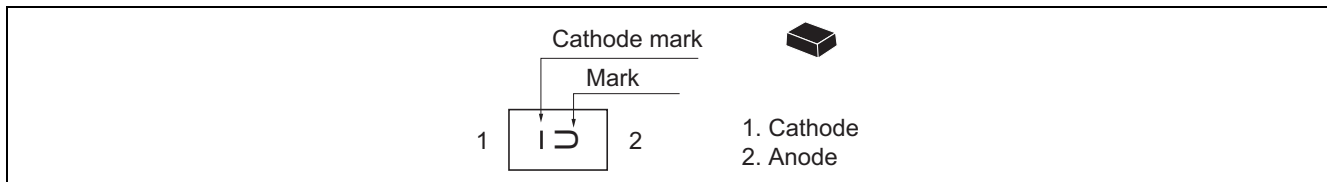
### Ordering Information

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 <sub>Z</sub> (V) *1		Test Condition	I <sub>R</sub> (μA)	Test Condition	r <sub>d</sub> (Ω)	Test Condition	(kV) *2
	Min	Max	I <sub>Z</sub> (mA)	Max	V <sub>R</sub> (V)	Max	I <sub>Z</sub> (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

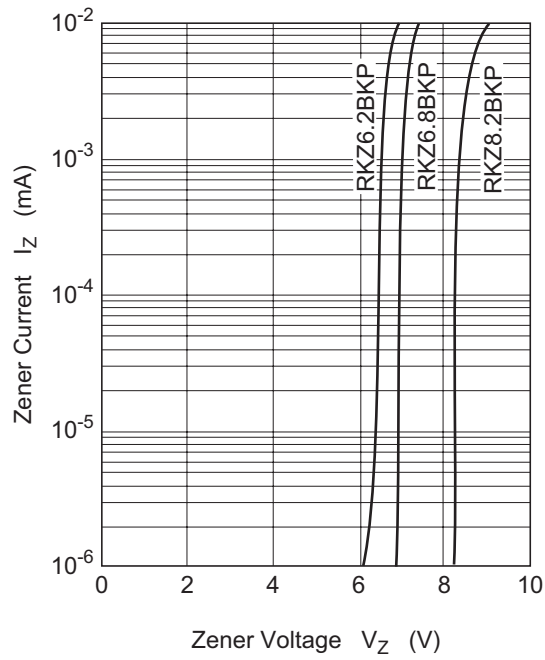


Fig.1 Zener current vs. Zener voltage

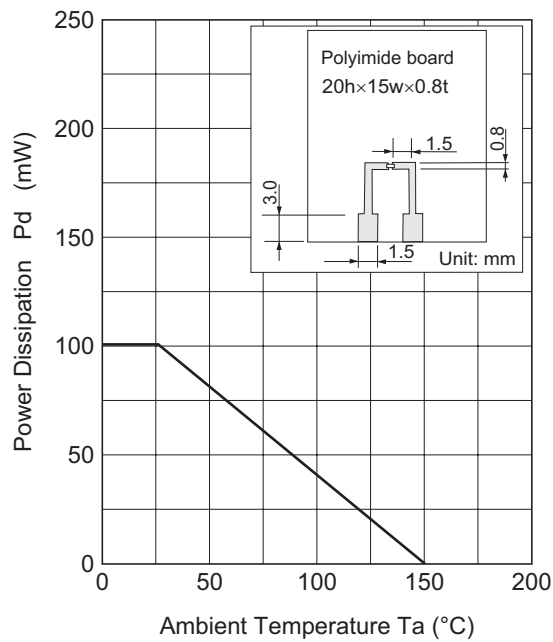
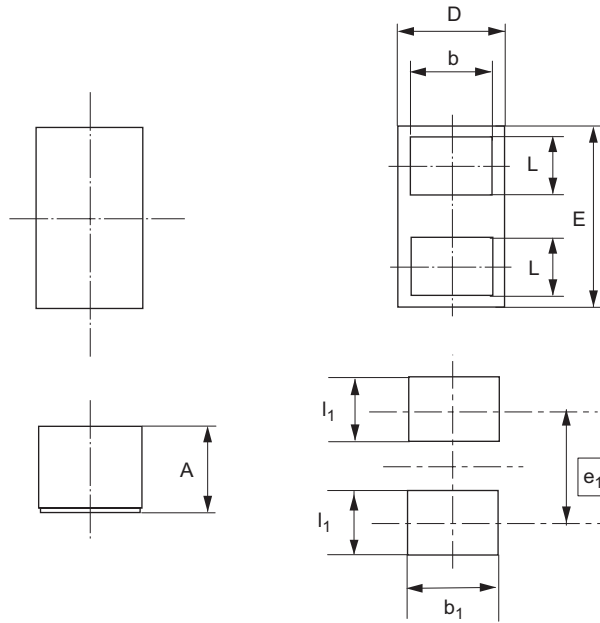


Fig.2 Power Dissipation vs. Ambient Temperature

## 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 <sub>1</sub>	—	0.31	—
e <sub>1</sub>	—	0.38	—
l <sub>1</sub>	—	0.23	—

Notes:

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