

RKZ-KG Series

Silicon Planar Zener Diode for Surge Absorption and Stabilizer

REJ03G1512-0200

Rev.2.00

Jul 31, 2007

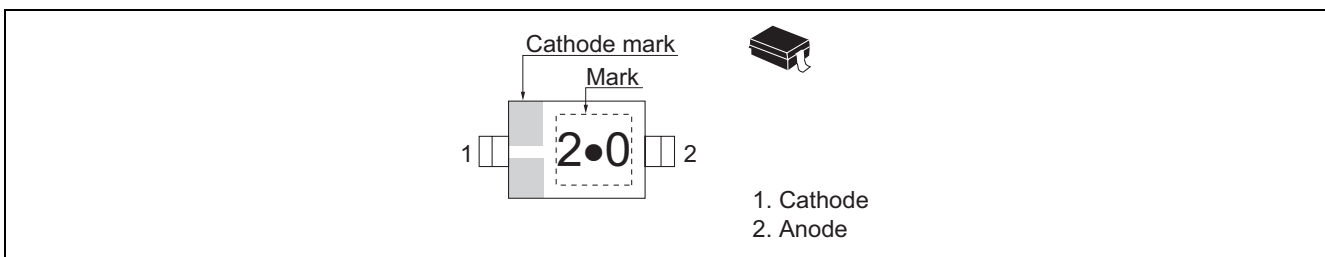
Features

- These diodes are delivered taped.
- Ultra small Resin Package (URP) is suitable for surface mount design.

Ordering Information

Part No.	Laser Mark	Package Name	Package Code
RKZ-KG Series	Let to Mark Code	URP	PTSP0002ZA-A

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd *1	200	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 *2	
	Vz (V) *1		Test Condition	IR (μA)	Test Condition	rd (Ω)	Test Condition	— (kV) *2
	Min	Max	Iz (mA)	Max	VR (V)	Max	Iz (mA)	Min
RKZ2.0BKG	1.90	2.20	5	120	0.5	100	5	30
RKZ2.2BKG	2.10	2.40	5	120	0.7	100	5	30
RKZ2.4BKG	2.30	2.60	5	120	1.0	100	5	30
RKZ2.7B2KG	2.65	2.90	5	120	1.0	110	5	30
RKZ3.0B2KG	2.95	3.20	5	50	1.0	120	5	30
RKZ3.3B2KG	3.25	3.50	5	20	1.0	130	5	30
RKZ3.6B2KG	3.55	3.80	5	10	1.0	130	5	30
RKZ3.9B2KG	3.87	4.10	5	10	1.0	130	5	30
RKZ4.3B2KG	4.15	4.34	5	10	1.0	130	5	30
RKZ4.7B2KG	4.55	4.75	5	10	1.0	130	5	30
RKZ5.1B2KG	4.98	5.20	5	5	1.5	130	5	30
RKZ5.6B2KG	5.49	5.73	5	5	2.5	80	5	30
RKZ6.2B2KG	6.06	6.33	5	2	3.0	50	5	30
RKZ6.8B2KG	6.65	6.93	5	2	3.5	30	5	30
RKZ7.5B2KG	7.28	7.60	5	2	4.0	30	5	30
RKZ8.2B2KG	8.02	8.36	5	2	5.0	30	5	30
RKZ9.1B2KG	8.85	9.23	5	2	6.0	30	5	30
RKZ10B2KG	9.77	10.21	5	2	7.0	30	5	30
RKZ11B2KG	10.76	11.22	5	2	8.0	30	5	30
RKZ12B2KG	11.74	12.24	5	2	9.0	35	5	30
RKZ13B2KG	12.91	13.49	5	2	10.0	35	5	30
RKZ15B2KG	14.34	14.98	5	2	11.0	40	5	25
RKZ16B2KG	15.85	16.51	5	2	12.0	40	5	25
RKZ18B2KG	17.56	18.35	5	2	13.0	45	5	25
RKZ20B2KG	19.52	20.39	5	2	15.0	50	5	20
RKZ22B2KG	21.54	22.47	5	2	17.0	55	5	20
RKZ24B2KG	23.72	24.78	5	2	19.0	60	5	15
RKZ27BKG	25.10	28.90	2	2	21.0	70	2	15
RKZ30BKG	28.00	32.00	2	2	23.0	80	2	13
RKZ33BKG	31.00	35.00	2	2	25.0	80	2	8
RKZ36BKG	34.00	38.00	2	2	27.0	90	2	8

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

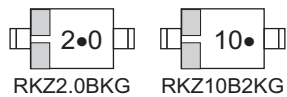
2. C =150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse
Failure criterion ; According to IR spec

Mark Code

Part No.	Mark No.
RKZ2.0BKG	2 • 0
RKZ2.2BKG	2 • 2
RKZ2.4BKG	2 • 4
RKZ2.7B2KG	2 • 7
RKZ3.0B2KG	3 • 0
RKZ3.3B2KG	3 • 3
RKZ3.6B2KG	3 • 6
RKZ3.9B2KG	3 • 9
RKZ4.3B2KG	4 • 3
RKZ4.7B2KG	4 • 7
RKZ5.1B2KG	5 • 1
RKZ5.6B2KG	5 • 6
RKZ6.2B2KG	6 • 2
RKZ6.8B2KG	6 • 8
RKZ7.5B2KG	7 • 5
RKZ8.2B2KG	8 • 2

Part No.	Mark No.
RKZ9.1B2KG	9 • 1
RKZ10B2KG	10 •
RKZ11B2KG	11 •
RKZ12B2KG	12 •
RKZ13B2KG	13 •
RKZ15B2KG	15 •
RKZ16B2KG	16 •
RKZ18B2KG	18 •
RKZ20B2KG	20 •
RKZ22B2KG	22 •
RKZ24B2KG	24 •
RKZ27BKG	27 •
RKZ30BKG	30 •
RKZ33BKG	33 •
RKZ36BKG	36 •

Note: 1. Example of Marking



Main Characteristic

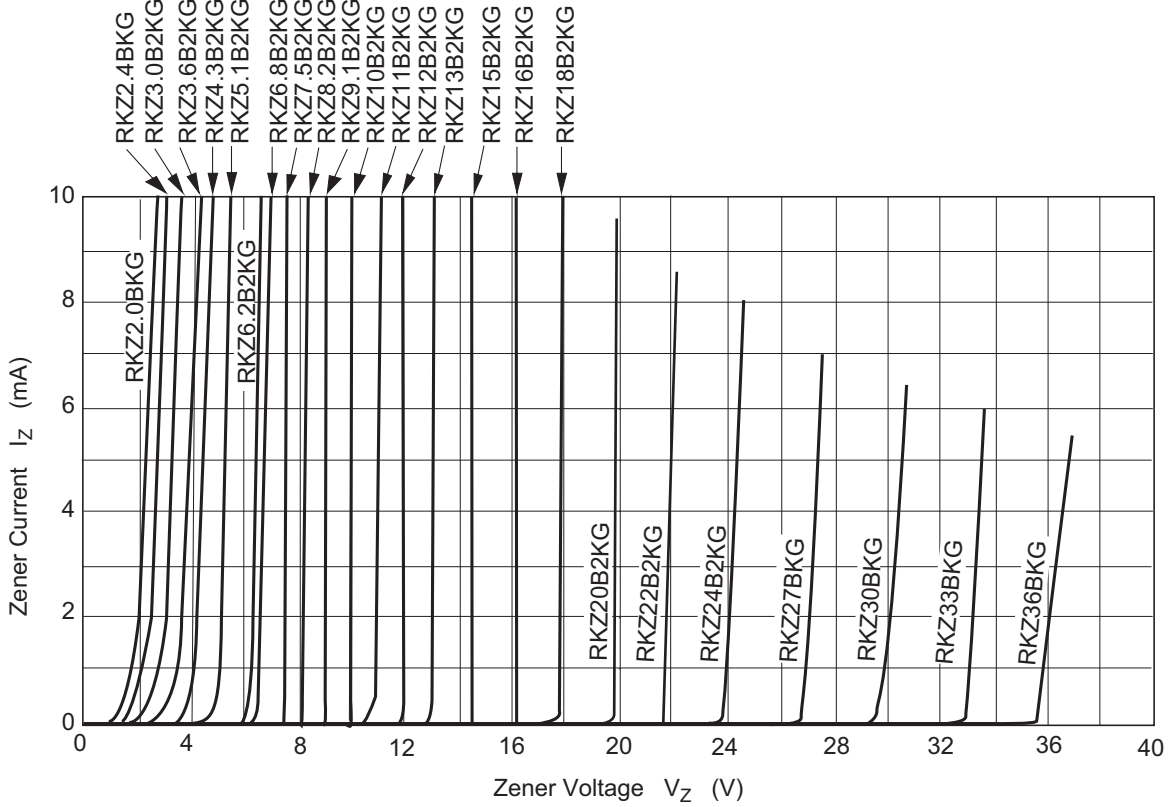


Fig.1 Zener current vs. Zener voltage

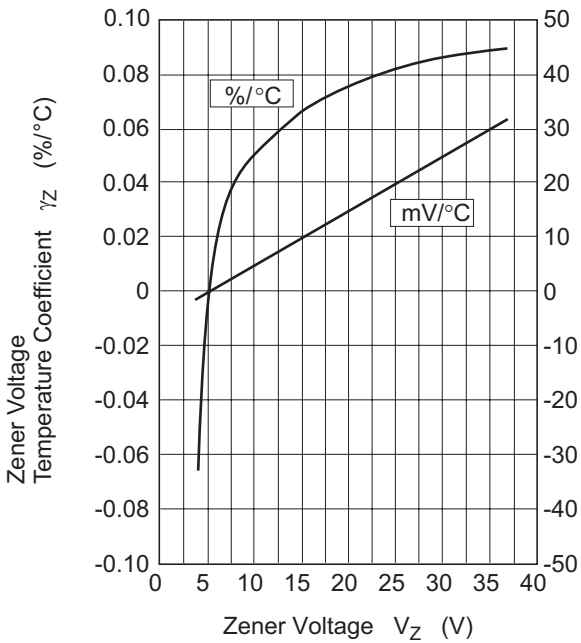


Fig.2 Temperature Coefficient vs. Zener voltage

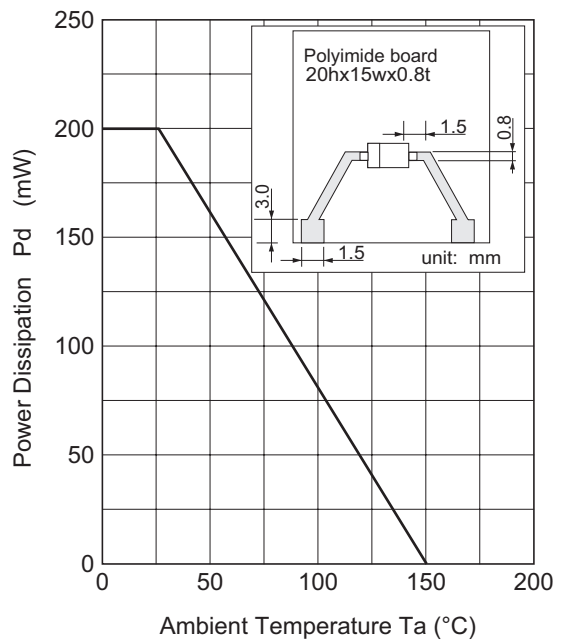


Fig.3 Power Dissipation vs. Ambient Temperature

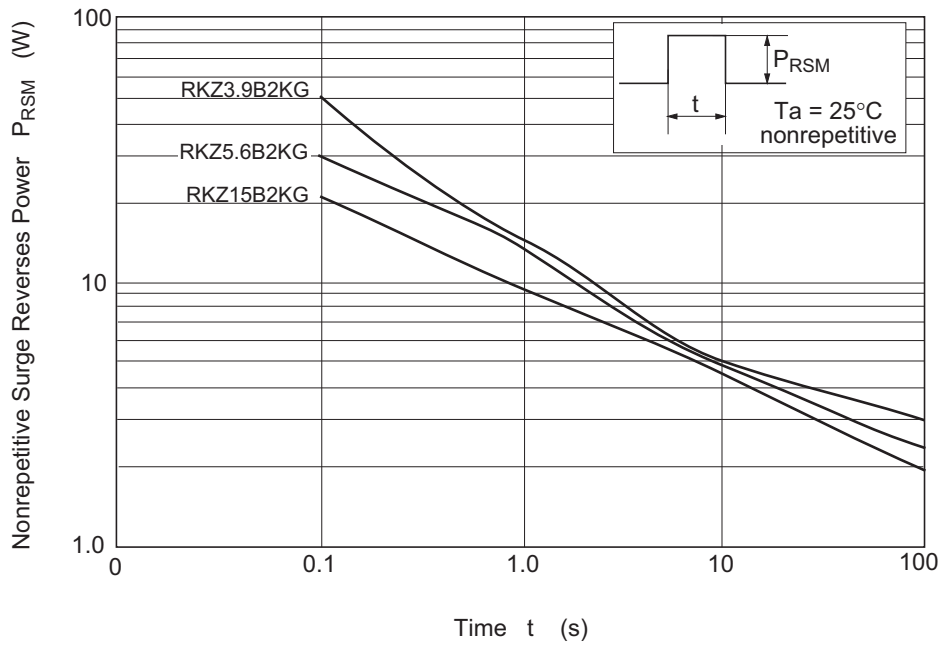
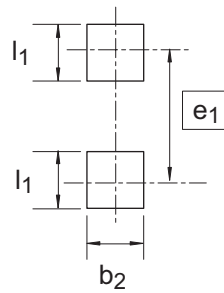
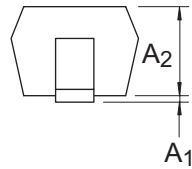
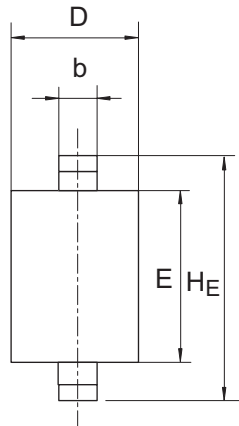


Fig.4 Surge Reverse Power Ratings(Reference data)

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
URP	SC-76A	PTSP0002ZA-A	URP / URPV	0.004g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A ₁	0	-	0.1
A ₂	0.75	0.90	1.05
b	0.15	0.30	0.45
D	1.10	1.25	1.40
E	1.55	1.70	1.85
H _E	2.35	2.50	2.65
b ₂	-	0.80	-
e ₁	-	2.30	-
l ₁	-	0.80	-

Notes:

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