

RKR104BKV

REJ03G1775-0100

Rev.1.00

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Silicon Schottky Barrier Diode for Rectifying

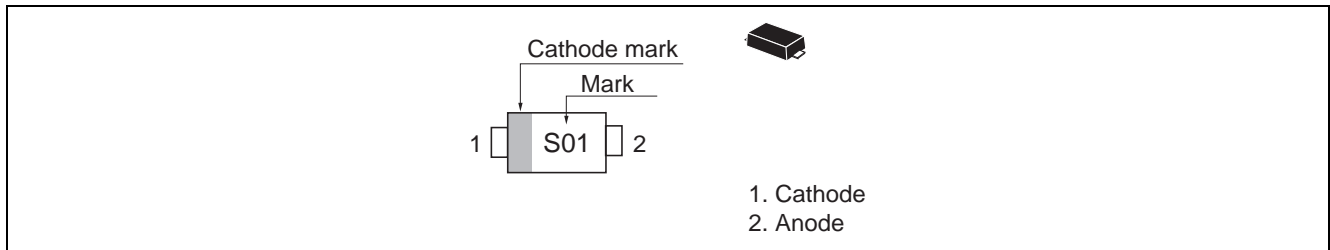
Features

- Low reverse current and suitable for high efficiency rectifying.
- Halogen free, environmental friendly package includes conformity to RoHS directive.
- Small Resin Package Flat lead type (SRP-F) is suitable for compact and high-density surface mount design.

Ordering Information

Part No	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKR104BKV P	S01	SRP-F	PWSF0002ZB-A	P (3,000pcs / reel)

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	40	V
Reverse voltage	V_R	40	V
Average rectified current	I_O^{*2}	1	A
Non-Repetitive peak forward surge current	I_{FSM}^{*1}	5	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

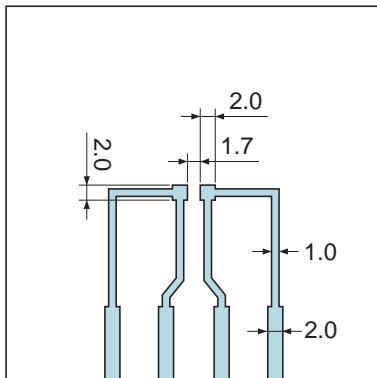
- Notes: 1. 10 ms sine wave 1 pulse
 2. Ta = 36°C, With Ceramics board (board size: 50 mm × 50 mm, Land size 2 mm × 2 mm)
 Short form wave (θ180°C), $V_R = 20$ V.

Electrical Characteristics *1

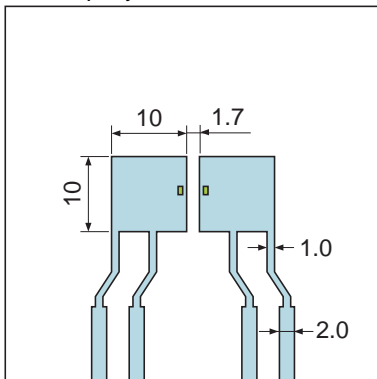
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	0.37	V	$I_F = 100$ mA
	V_{F2}	—	—	0.55		$I_F = 700$ mA
Reverse current	I_{R1}	—	—	10	μA	$V_R = 5$ V
	I_{R2}	—	—	50		$V_R = 40$ V
Capacitance	C	—	—	35	pF	$V_R = 10$ V, $f = 1$ MHz
Thermal resistance	$R_{th(j-a)}$	—	100	—	°C/W	Ceramics board *1
		—	200	—		Glass epoxy board *2

- Notes: 1. Ceramics board : 50h × 50w × 0.8t (mm)



2. Glass epoxy board



Main Characteristic

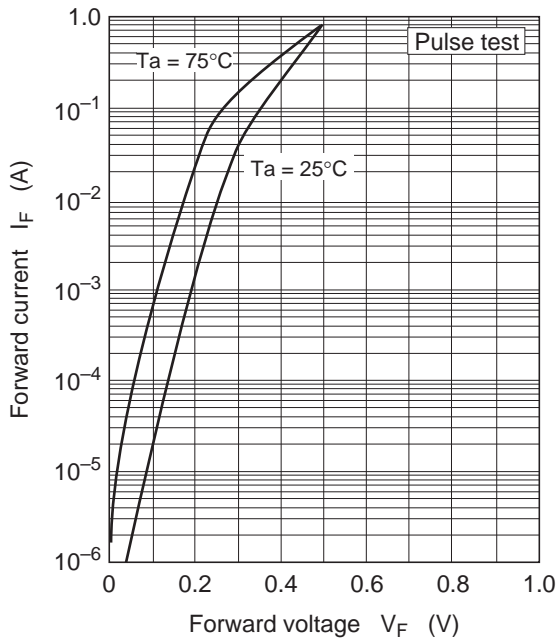


Fig.1 Forward current vs. Forward voltage

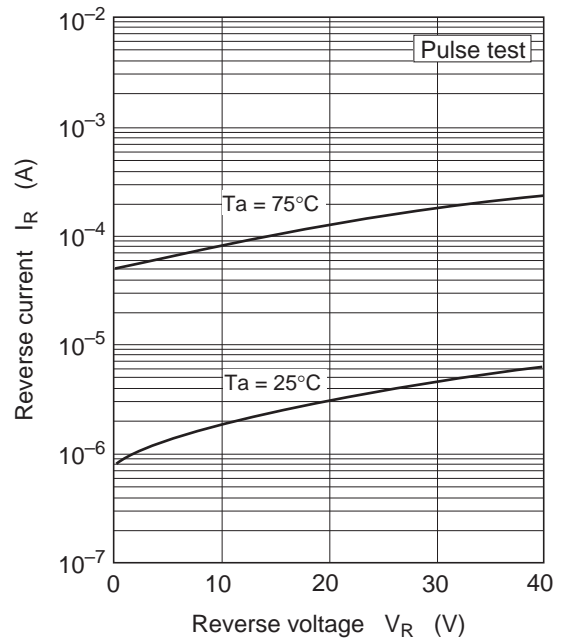


Fig.2 Reverse current vs. Reverse voltage

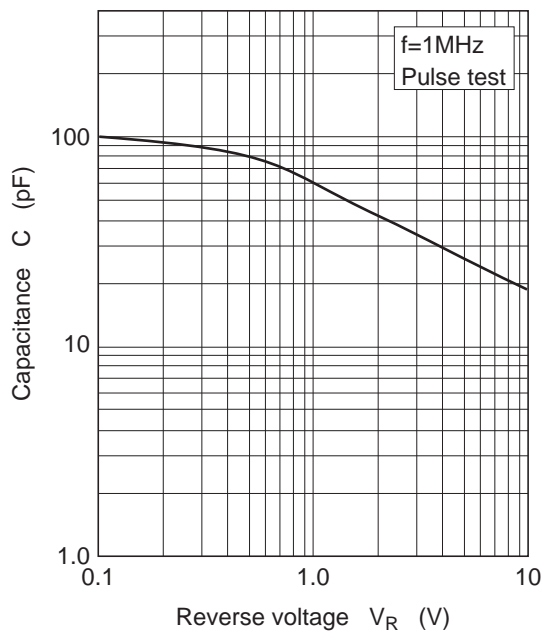


Fig.3 Capacitance vs. Reverse voltage

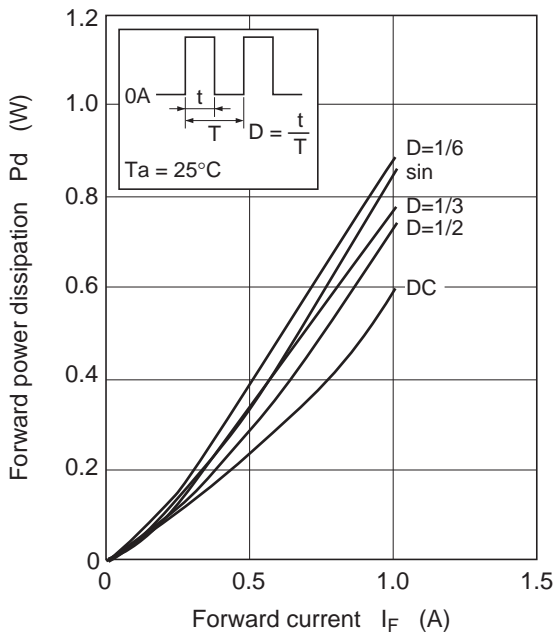


Fig.4 Forward power dissipation vs. Forward current

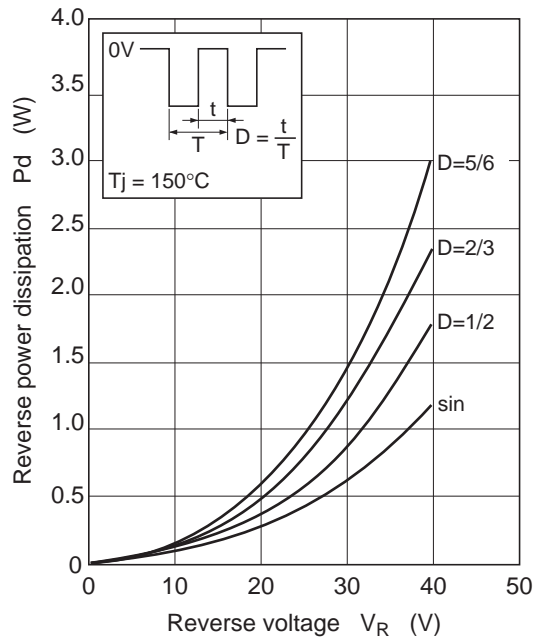


Fig.5 Reverse power dissipation vs. Reverse voltage

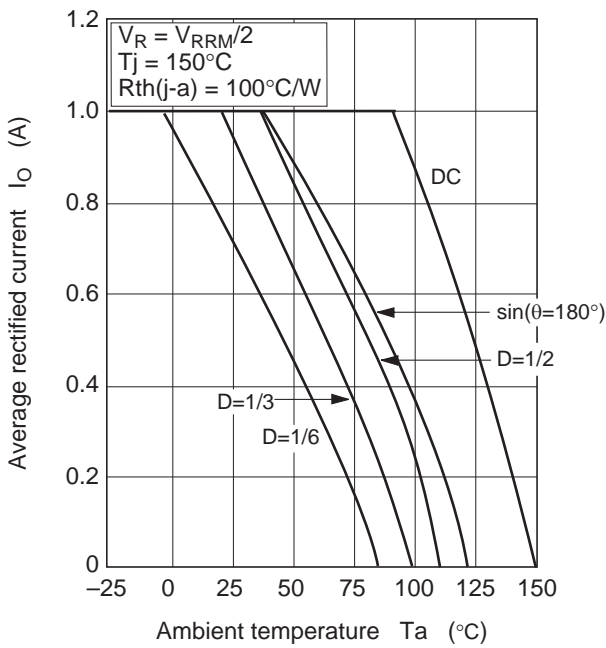
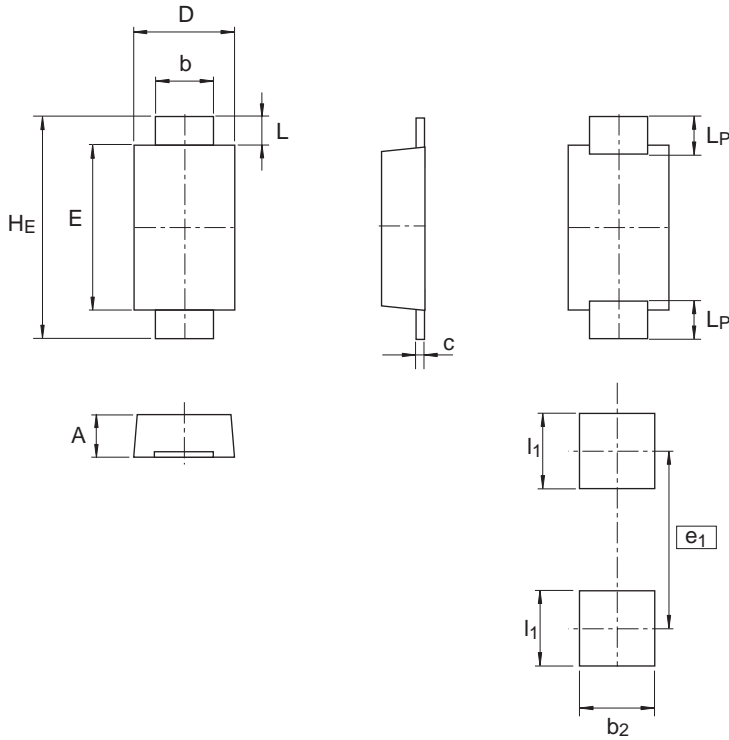


Fig.6 Average rectified current vs. Ambient temperature

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
SRP-F	—	PWSF0002ZB-A	SRP-FV	0.0084g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.6	0.7	0.8
b	0.8	0.9	1.0
c	0.08	0.13	0.18
D	1.5	1.6	1.7
E	2.5	2.6	2.7
HE	3.3	3.5	3.7
L	0.35	0.45	0.55
LP	—	0.6	—
b2	—	1.2	—
e1	—	2.8	—
l1	—	1.2	—

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Renesas Electronics America Inc.
2880 Scott Boulevard Santa Clara, CA 95050-2554, U.S.A.
Tel: +1-408-588-6000, Fax: +1-408-588-6130

Renesas Electronics Canada Limited
1101 Nicholson Road, Newmarket, Ontario L3Y 9C3, Canada
Tel: +1-905-898-5441, Fax: +1-905-898-3220

Renesas Electronics Europe Limited
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K
Tel: +44-1628-585-100, Fax: +44-1628-585-900

Renesas Electronics Europe GmbH
Arcadiastrasse 10, 40472 Düsseldorf, Germany
Tel: +49-211-65030, Fax: +49-211-6503-1327

Renesas Electronics (China) Co., Ltd.
7th Floor, Quantum Plaza, No.27 Zhichunlu Haidian District, Beijing 100083, P.R.China
Tel: +86-10-8235-1155, Fax: +86-10-8235-7679

Renesas Electronics (Shanghai) Co., Ltd.
Unit 204, 205, AZIA Center, No.1233 Lujiazui Ring Rd., Pudong District, Shanghai 200120, China
Tel: +86-21-5877-1818, Fax: +86-21-6887-7858 / -7898

Renesas Electronics Hong Kong Limited
Unit 1601-1613, 16/F., Tower 2, Grand Century Place, 193 Prince Edward Road West, Mongkok, Kowloon, Hong Kong
Tel: +852-2886-9318, Fax: +852-2886-9022/9044

Renesas Electronics Taiwan Co., Ltd.
7F, No. 363 Fu Shing North Road Taipei, Taiwan
Tel: +886-2-8175-9600, Fax: +886-2-8175-9670

Renesas Electronics Singapore Pte. Ltd.
1 HarbourFront Avenue, #06-10, Keppel Bay Tower, Singapore 098632
Tel: +65-6213-0200, Fax: +65-6278-8001

Renesas Electronics Malaysia Sdn.Bhd.
Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No. 18, Jln Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia
Tel: +60-3-7955-9390, Fax: +60-3-7955-9510

Renesas Electronics Korea Co., Ltd.
11F., Samik Laviel' or Bldg., 720-2 Yeoksam-Dong, Kangnam-Ku, Seoul 135-080, Korea
Tel: +82-2-558-3737, Fax: +82-2-558-5141