

RKR0103BYPKQ

R07DS0564EJ0100

Rev.1.00

Silicon Schottky Barrier Diode for Rectifying

Jan 12, 2012

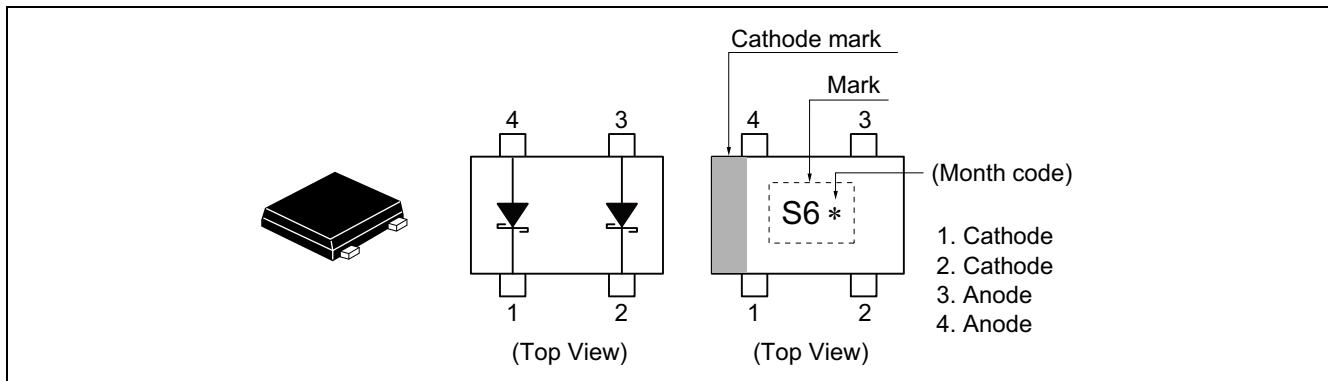
Features

- Low reverse voltage drop and suitable for high efficiency rectifying.
- VSON-4 Package is suitable for high density surface mounting.

Ordering Information

Part No	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKR0103BYPKQ # P1	S6	VSON-4	PUSN0004KA-A	P1 (3,000pcs / reel)

Pin Arrangement



Month Code

Month of Manufacture	Assemble
	MALAYSIA
January	1
February	2
March	3
April	4
May	5
June	6

Month of Manufacture	Assemble
	MALAYSIA
July	7
August	8
September	9
October	W
November	X
December	Y

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	30	V
Reverse voltage	V_R	30	V
Average rectified current	I_O^{*1}	100	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*2}	1	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

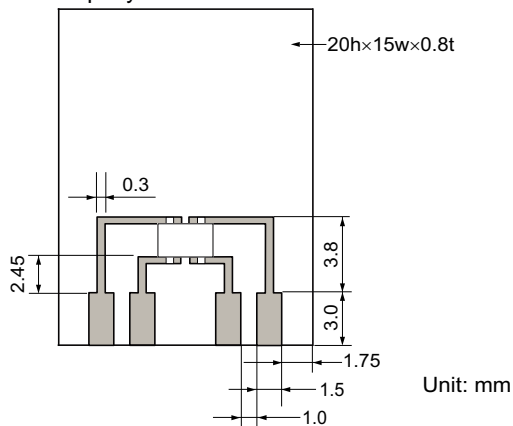
Notes: 1. Per one device. See Fig.4 – Fig.6.
2. t = 10 ms sin wave 1 pulse.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	0.35	V	$I_F = 1 \text{ mA}$
	V_{F2}	—	—	0.40		$I_F = 10 \text{ mA}$
	V_{F3}	—	—	0.50		$I_F = 100 \text{ mA}$
Reverse current	I_{R1}	—	—	0.5	μA	$V_R = 10 \text{ V}$
	I_{R2}	—	—	10		$V_R = 30 \text{ V}$
Thermal resistance	$R_{th(j-a)}$	—	700	—	°C/W	Glass epoxy board ^{*1}

Note: 1. Glass epoxy board



Main Characteristics

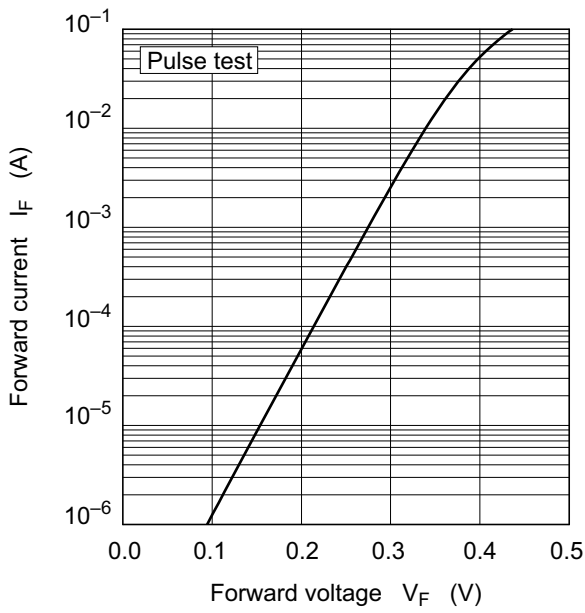


Fig.1 Forward current vs. Forward voltage

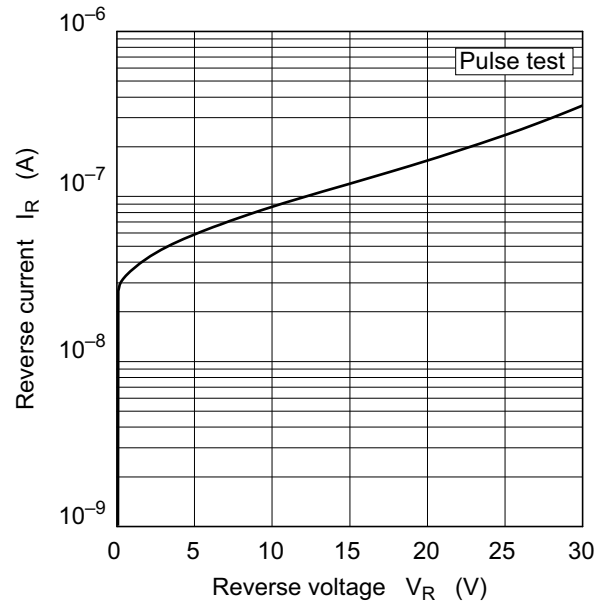


Fig.2 Reverse current vs. Reverse voltage

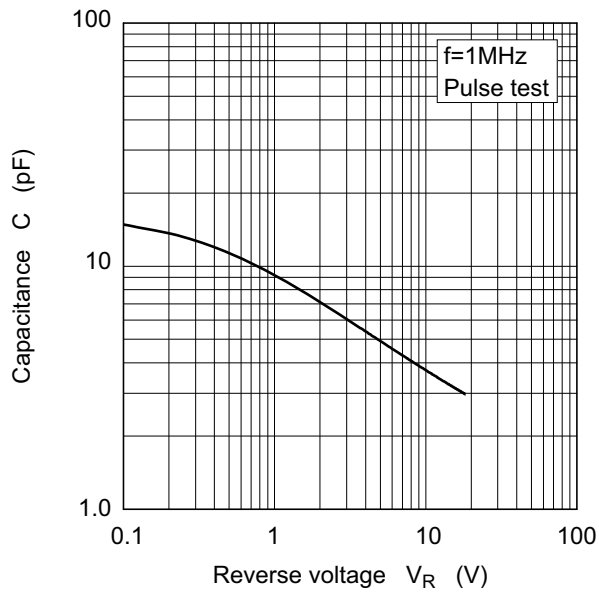


Fig.3 Capacitance vs. Reverse voltage

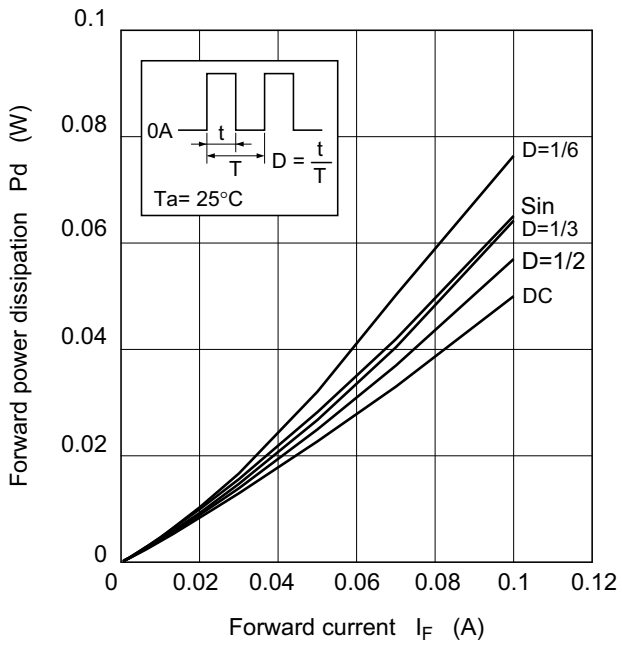


Fig.4 Forward power dissipation vs. Forward current

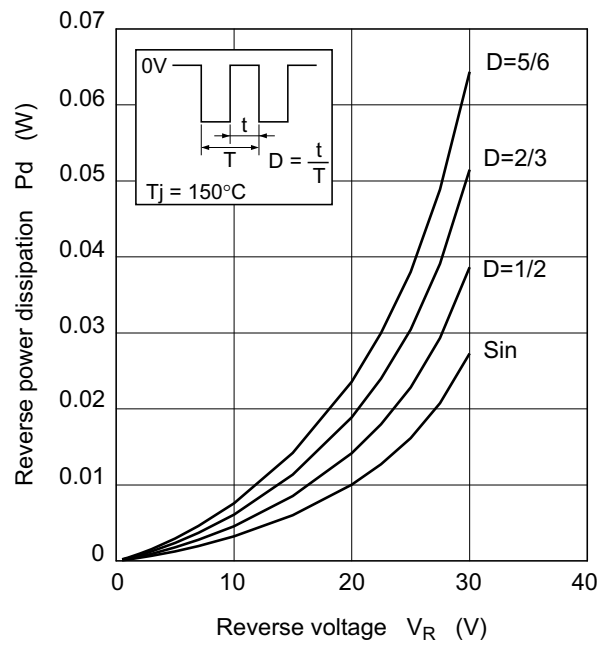


Fig.5 Reverse power dissipation vs. Reverse voltage

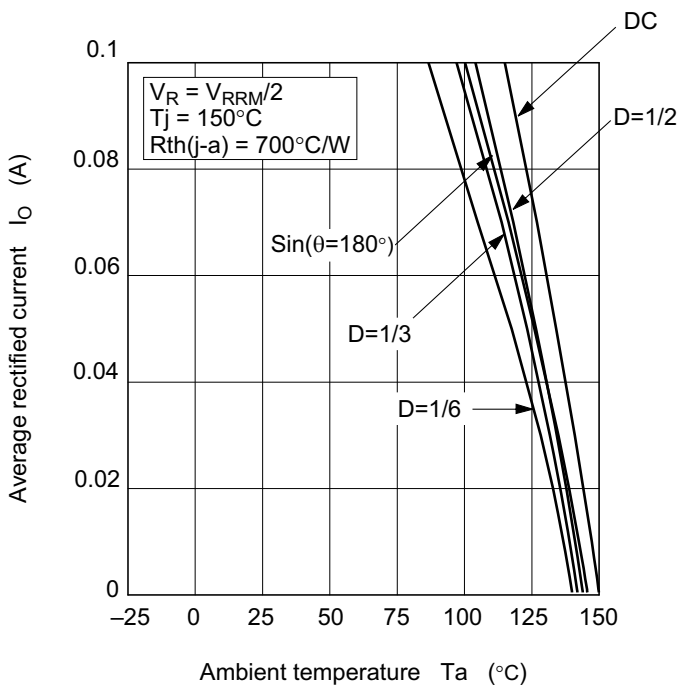
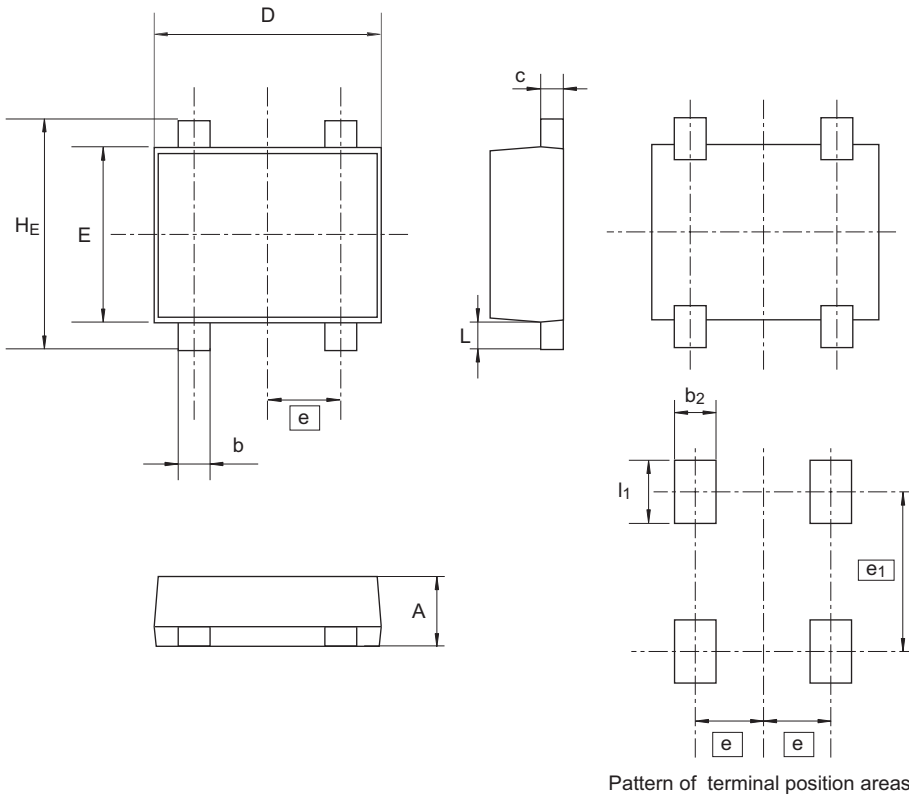


Fig.6 Average rectified current vs. Ambient temperature

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
VSON-4	—	PUSN0004KA-A	VSON-4V	0.002g



Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.50	0.55	0.60
b	0.15	0.2	0.3
c	0.07	0.12	0.22
D	1.55	1.6	1.65
E	1.1	1.2	1.3
e	—	0.5	—
HE	1.55	1.6	1.65
L	—	0.2	—
b2	—	0.3	—
e1	—	1.35	—
l1	—	0.45	—

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Renesas Electronics America Inc.
2880 Scott Boulevard Santa Clara, CA 95050-2554, U.S.A.
Tel: +1-408-586-6000, 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.
13F, 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: +65-6276-8001

Renesas Electronics Malaysia Sdn.Bhd.
Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No. 18, Jin 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 Lavied' or Bldg., 720-2 Yeoksam-Dong, Kangnam-Ku, Seoul 135-080, Korea
Tel: +82-2-558-3737, Fax: +82-2-558-5141