RKR0103AYPKQ

Silicon Schottky Barrier Diode for Rectifying

R07DS0563EJ0100
Rev.1.00
Jan 12, 2012

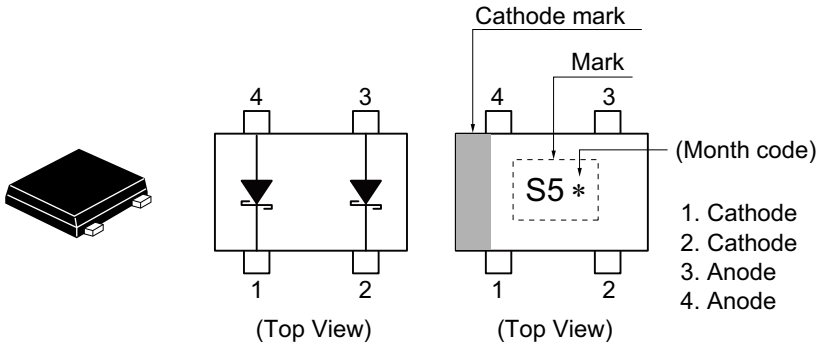
Features

- Low forward 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)
RKR0103AYPKQ # P1	S5	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	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

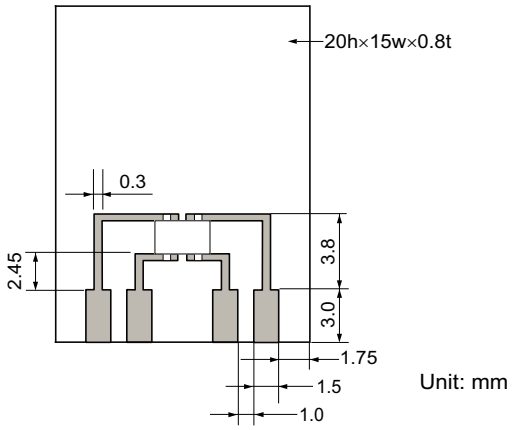
Notes: 1. Per one device. See Fig.4 – Fig.6.
2. t = 10 ms sin wave 1 pulse.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	0.25	V	I_F = 1 mA
	V_{F2}	—	—	0.30		I_F = 10 mA
	V_{F3}	—	—	0.40		I_F = 100 mA
Reverse current	I_R	—	—	10	μA	V_R = 10 V
Thermal resistance	Rth(j-a)	—	700	—	°C/W	Glass epoxy board *1

Note: 1. Glass epoxy board



Main Characteristics

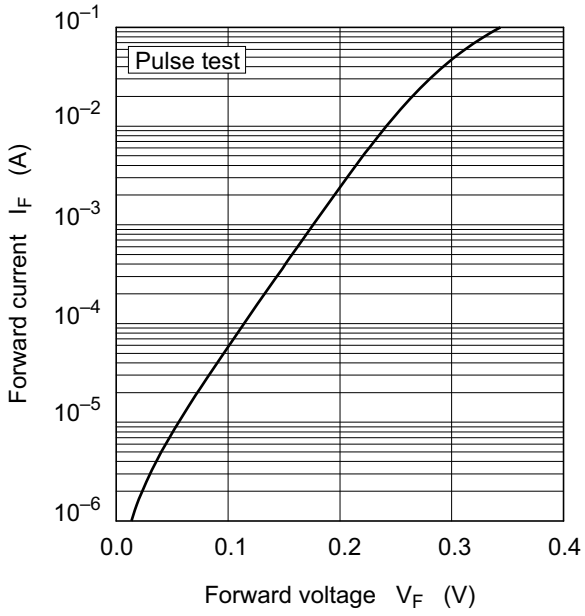


Fig.1 Forward current vs. Forward voltage

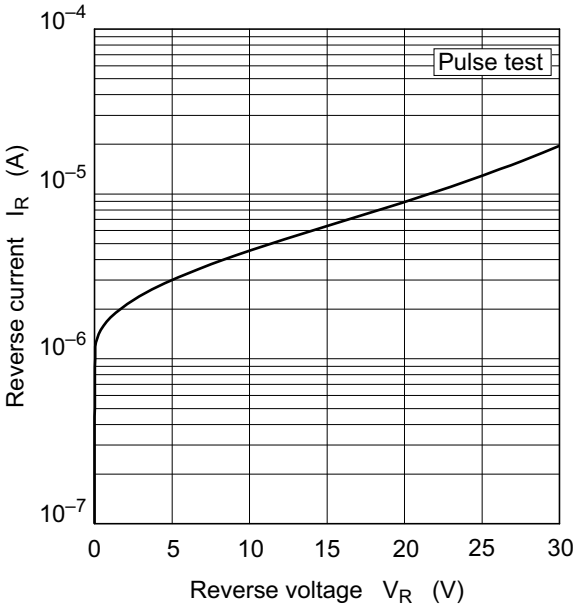


Fig.2 Reverse current vs. Reverse voltage

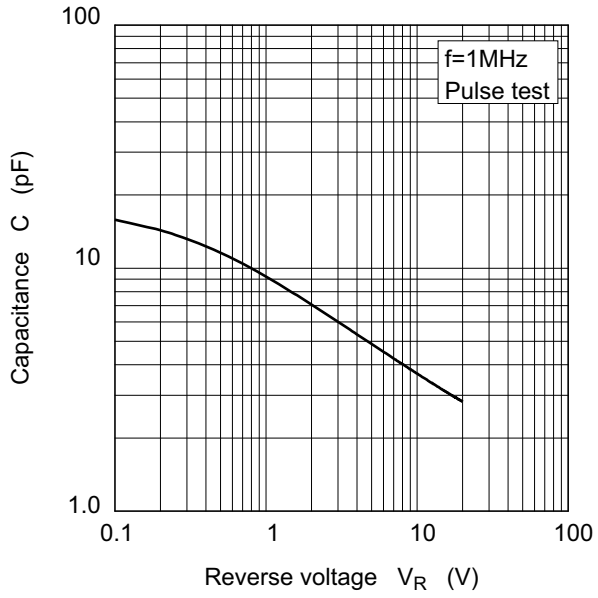


Fig.3 Capacitance vs. Reverse voltage

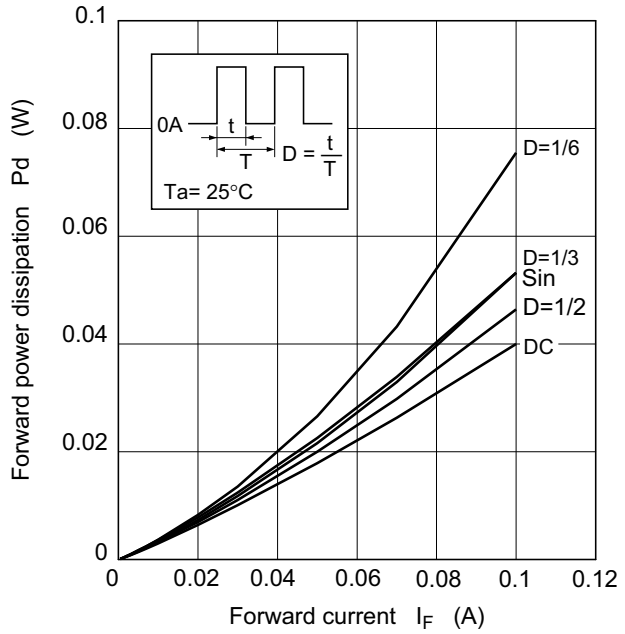


Fig.4 Forward power dissipation vs. Forward current

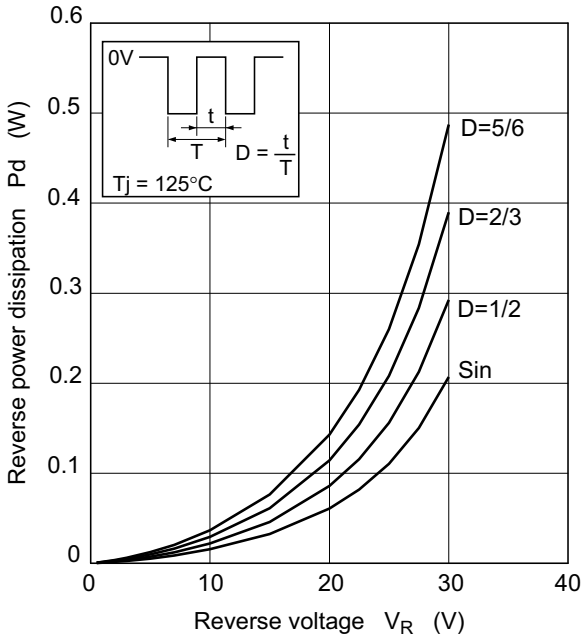


Fig.5 Reverse power dissipation vs. Reverse voltage

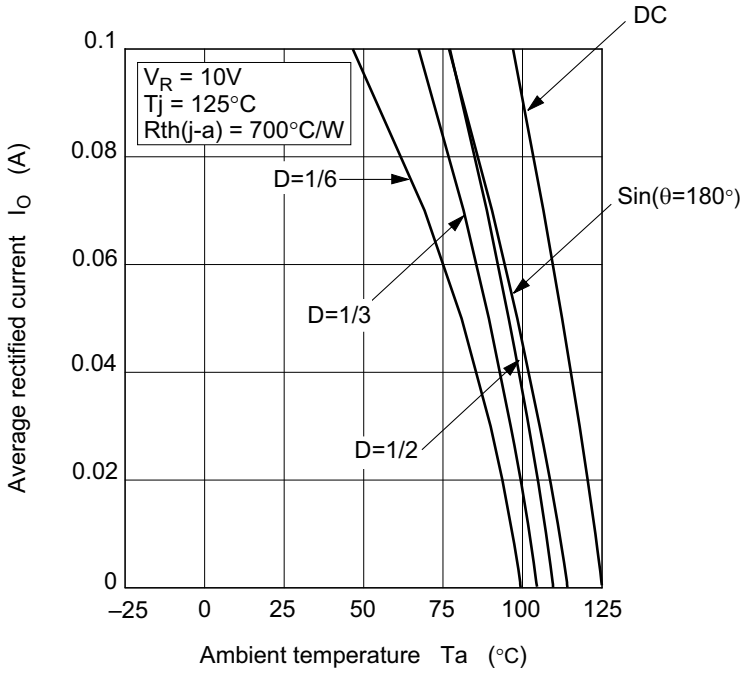
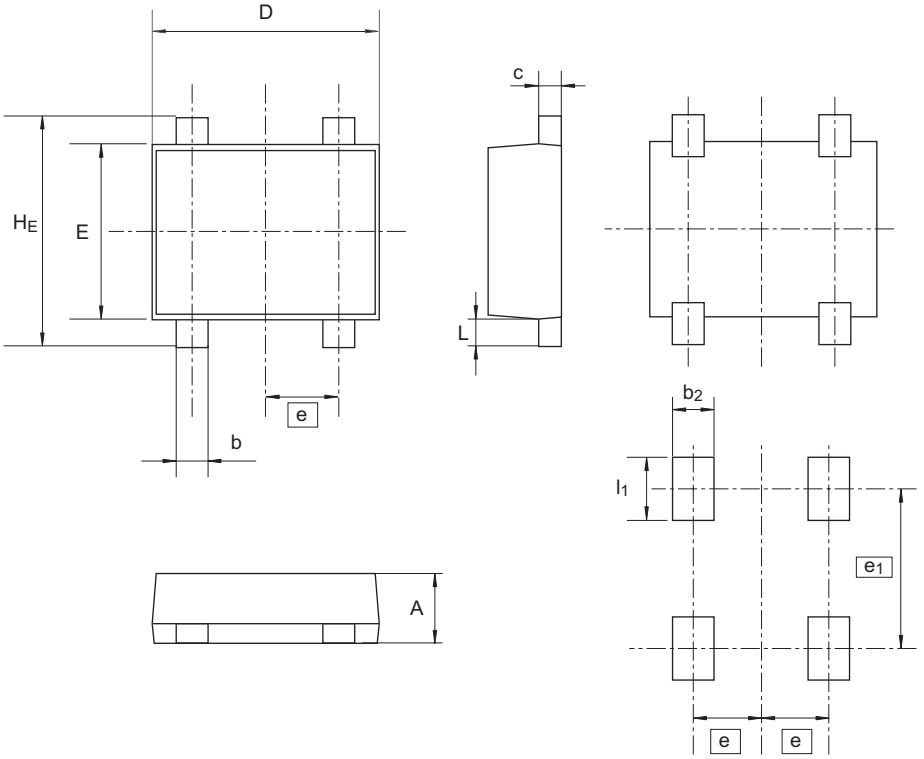


Fig.6 Average rectified current vs. Ambient temperature

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	—
H_E	1.55	1.6	1.65
L	—	0.2	—
b_2	—	0.3	—
e_1	—	1.35	—
l_1	—	0.45	—

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