

# RKR0303AKJ

R07DS0249EJ0300

Rev.3.00

## Silicon Schottky Barrier Diode for Rectifying

Jan 25, 2011

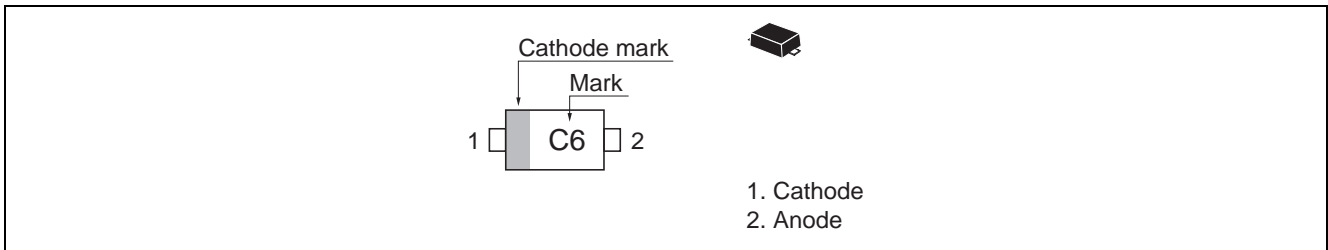
### Features

- Low forward voltage drop and suitable for high efficiency rectifying.
- Ultra small Flat Lead Package (UFP) is suitable for compact and high-density surface mount design.

### Ordering Information

Part No.	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKR0303AKJ P RKR0303AKJ R	C6	UFP	PWSF0002ZA-A	P (4,000pcs / reel) R (8,000pcs / reel)

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Reverse voltage	$V_R$	30	V
Forward current	$I_F^{*1}$	0.3	A
Non-Repetitive peak forward surge current	$I_{FSM}^{*2}$	1	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

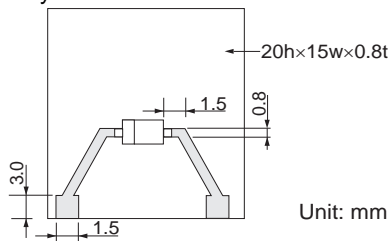
- Notes: 1. See from Fig.4 to Fig.6.  
2. 10 ms sine wave 1 pulse.

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	0.42	V	$I_F = 300 \text{ mA}$
Reverse current	$I_R$	—	—	200	$\mu\text{A}$	$V_R = 30 \text{ V}$
Thermal resistance	$R_{th(j-a)}$	—	600	—	°C/W	Polyimide board <sup>*1</sup>

- Notes: 1. Polyimide board



2. In the UFP package, some lead is exposed because the tip of the lead is used as the cutting plane. Therefore, the solderability of the lead tip has been ignored. Please test and confirm before use.

Main Characteristics

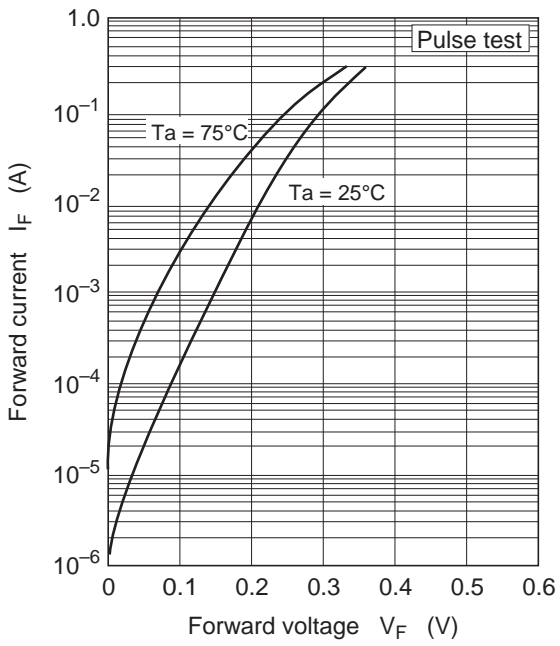


Fig.1 Forward current vs. Forward voltage

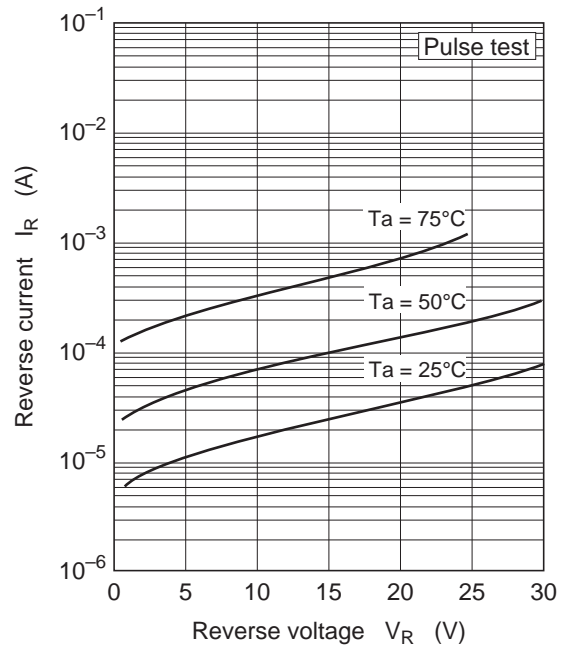


Fig.2 Reverse current vs. Reverse voltage

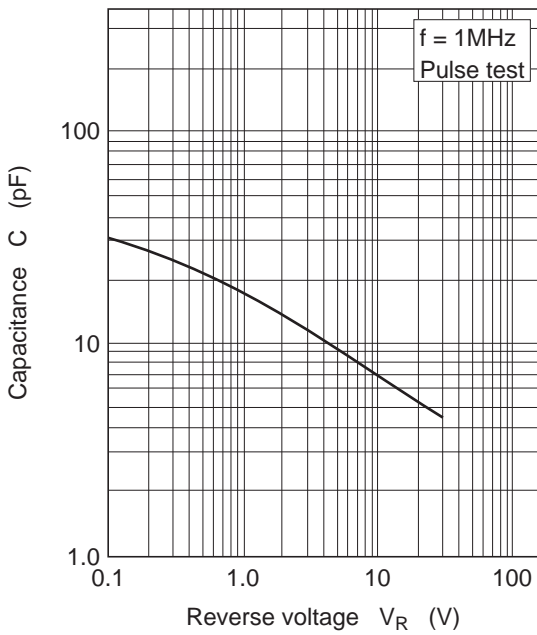


Fig.3 Capacitance vs. Reverse voltage

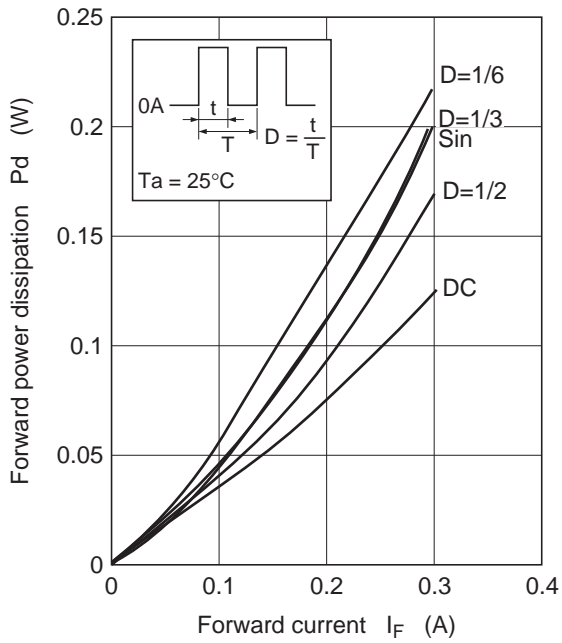


Fig.4 Forward power dissipation vs. Forward current

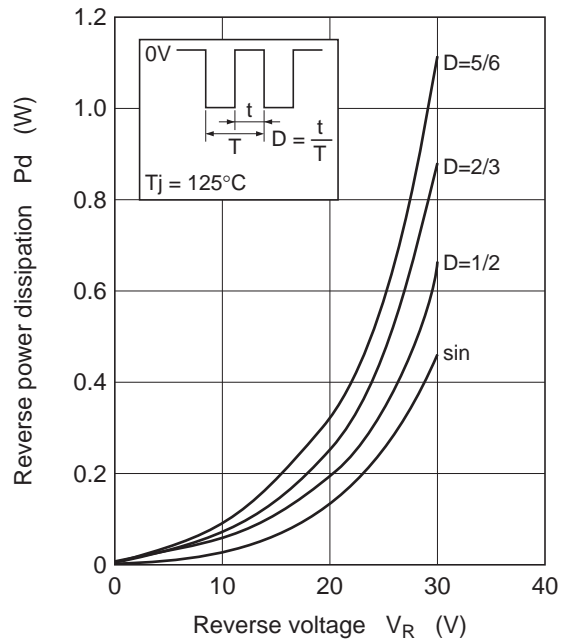


Fig.5 Reverse power dissipation vs. Reverse voltage

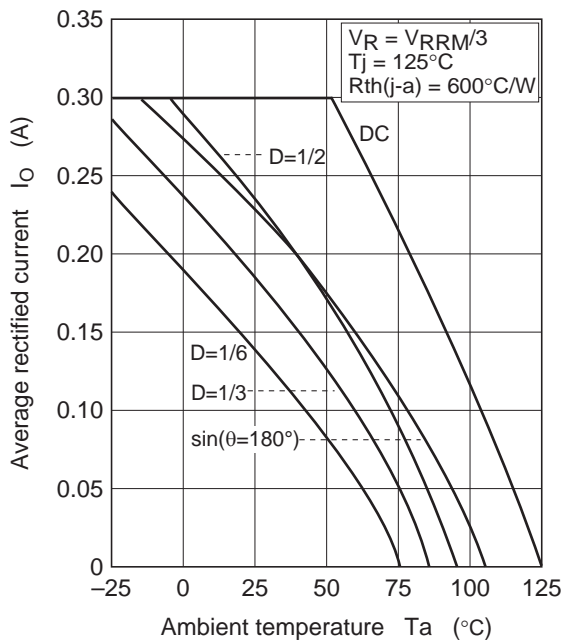
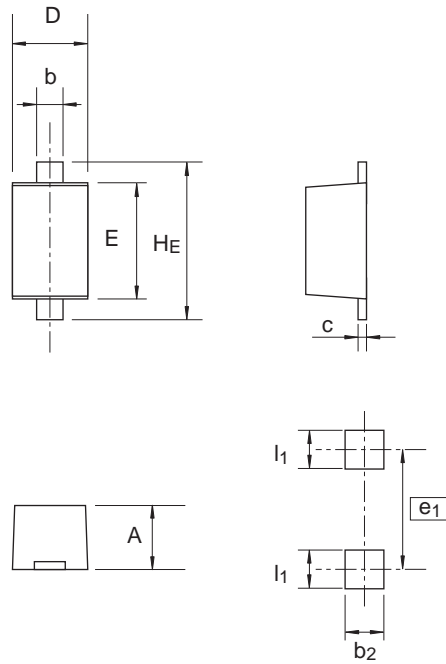


Fig.6 Average rectified current vs. Ambient temperature

### Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
UFP	SC-79	PWSF0002ZA-A	UFP / UFPV	0.0016g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.50	0.60	0.70
b	0.25	0.30	0.35
c	0.08	0.13	0.18
D	0.70	0.80	0.90
E	1.10	1.20	1.30
HE	1.50	1.60	1.70
b2	—	0.80	—
e1	—	1.70	—
l1	—	0.60	—

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