

HRC0201A

Silicon Schottky Barrier Diode for Rectifying

REJ03G0618-0200
 Rev.2.00
 Jan 09, 2009

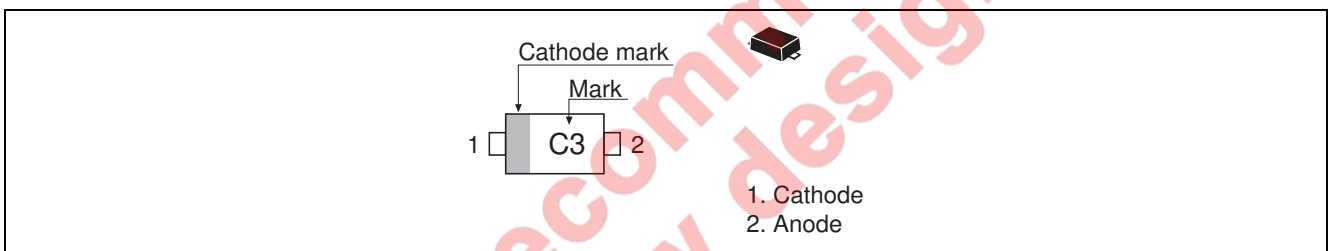
Features

- 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)
HRC0201ATRF	C3	UFP	PWSF0002ZA-A	TRF (4,000 pcs / reel)

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}^{*1}	15	V
Reverse voltage	V_R	15	V
Average rectified current	I_O^{*1}	200	mA
Peak forward current	I_{FM}	300	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*1}	1	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

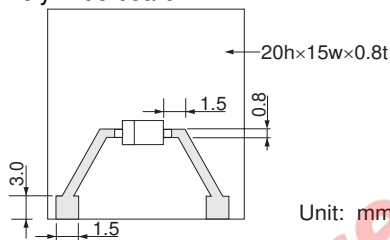
Notes: 1. See from Fig.4 to Fig.6, with polyimide board.
2. 10 ms sine wave 1 pulse.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.39	V	$I_F = 200 \text{ mA}$
Reverse current	I_R	—	—	50	μA	$V_R = 6 \text{ V}$
Capacitance	C	—	18	—	pF	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$
Thermal resistance	$R_{th(j-a)}$	—	600	—	°C/W	Polyimide board ^{*1}

Note: 1. Polyimide board



Note: 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

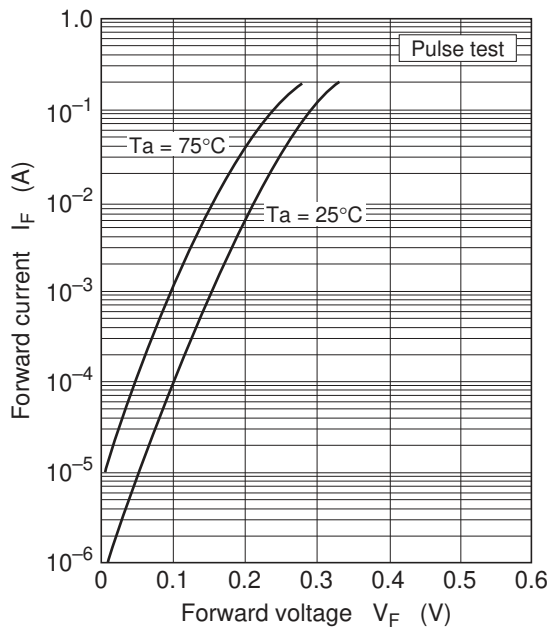


Fig.1 Forward current vs. Forward voltage

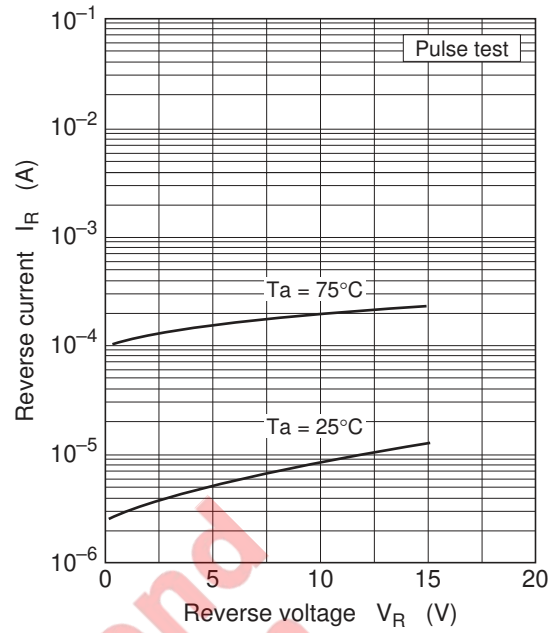


Fig.2 Reverse current vs. Reverse voltage

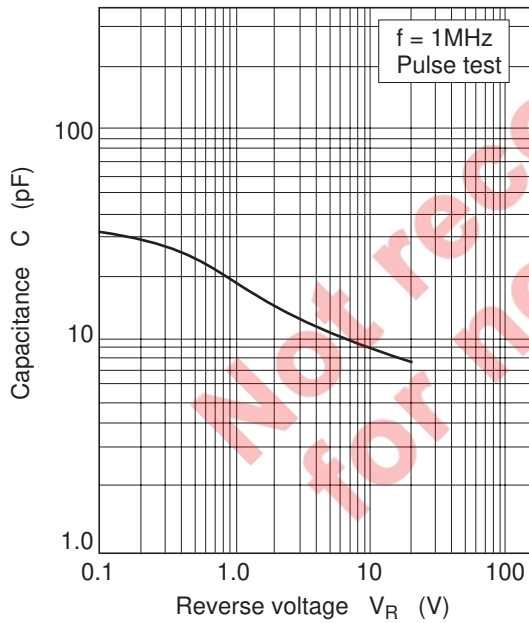


Fig.3 Capacitance vs. Reverse voltage

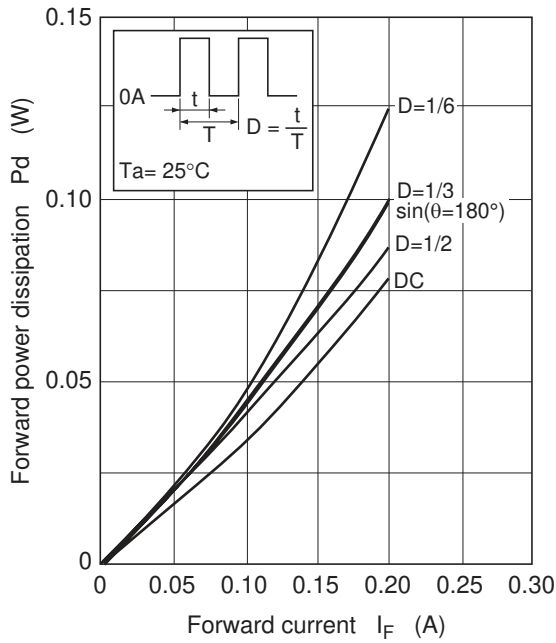


Fig.4 Forward power dissipation vs. Forward current

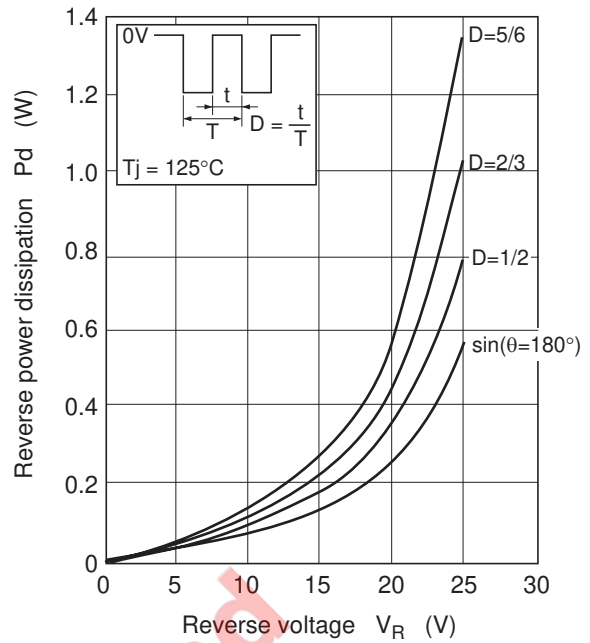


Fig.5 Reverse power dissipation vs. Reverse voltage

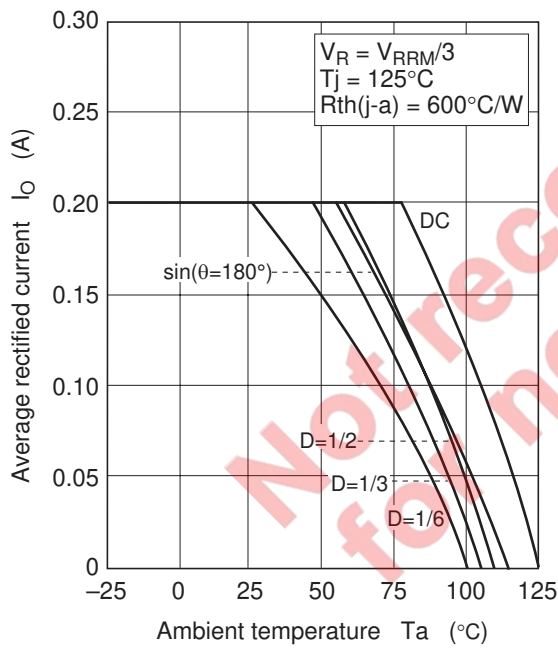
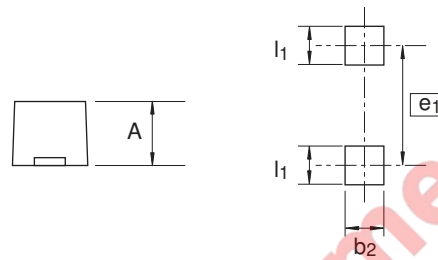
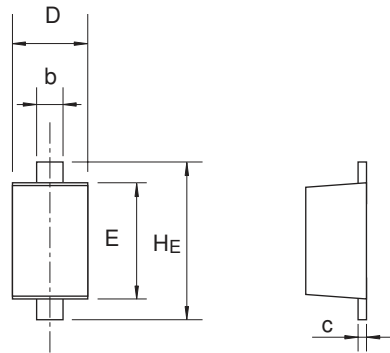


Fig.6 Average rectified current vs. Ambient temperature

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	—

Not recommended for new design

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Renesas Technology Korea Co., Ltd.
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Tel: <82> (2) 796-3115, Fax: <82> (2) 796-2145

Renesas Technology 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: <603> 7955-9390, Fax: <603> 7955-9510

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April 1st, 2010
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