

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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Not recommended  
for new design

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The Renesas logo, featuring the word "RENESAS" in a bold, sans-serif font with a stylized "R" that has a horizontal bar extending to the left.

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## HRW0703A

### Silicon Schottky Barrier Diode for Rectifying

REJ03G0160-0600Z  
(Previous: ADE-208-110E)  
Rev.6.00  
Jan.06.2004

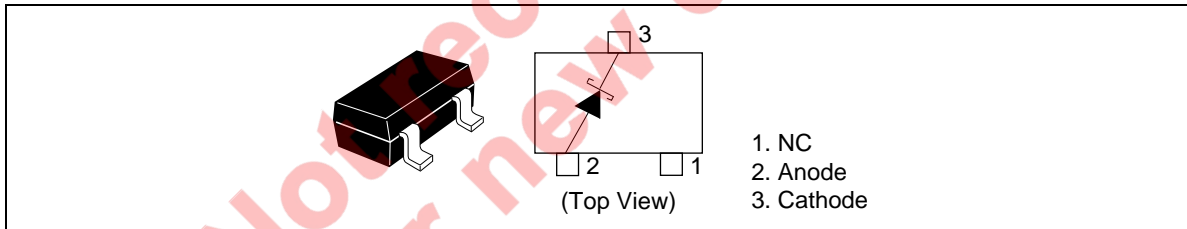
#### Features

- Low forward voltage drop and suitable for high efficiency rectifying.
- MPAK Package is suitable for high density surface mounting and high speed assembly.

#### Ordering Information

Type No.	Laser Mark	Package Code
HRW0703A	S8	MPAK

#### Pin Arrangement



### Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}^{*1}$	30	V
Forward current	$I_F^{*1}$	700	mA
Non-Repetitive peak forward surge current	$I_{FSM}^{*2}$	5	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

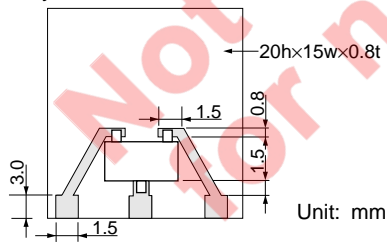
Notes: 1. See from Fig.4 to Fig.7.  
 2. 50 Hz sine wave 1 pulse

### Electrical Characteristics

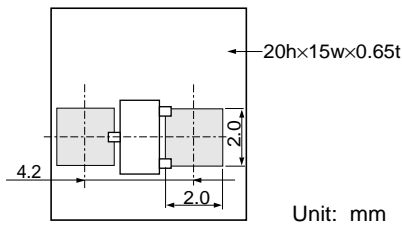
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	0.5	V	$I_F = 700 \text{ mA}$
Reverse current	$I_R$	—	—	100	μA	$V_R = 30 \text{ V}$
Capacitance	C	—	150	—	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Thermal resistance	Rth1(j-a)	—	390	—	°C/W	Polyimide board <sup>1</sup>
	Rth2(j-a)	—	290	—	°C/W	Ceramic board <sup>2</sup>

Notes: 1. Polyimide board



2. Ceramic board



Main Characteristic

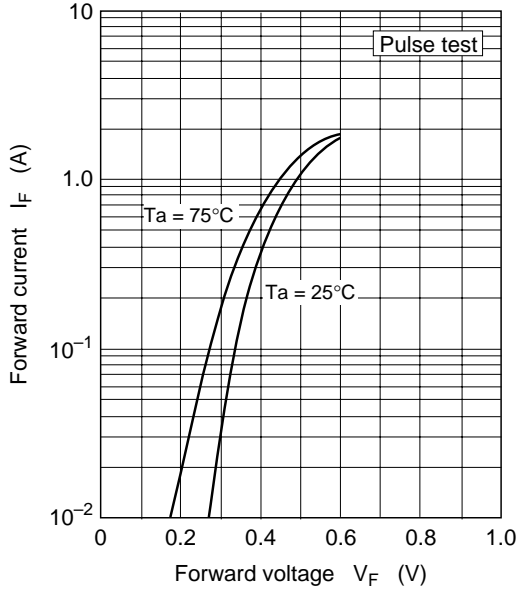


Fig.1 Forward current vs. Forward voltage

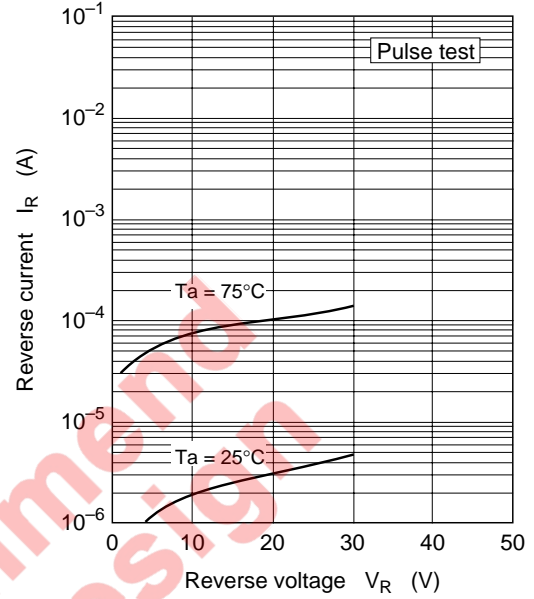


Fig.2 Reverse current vs. Reverse voltage

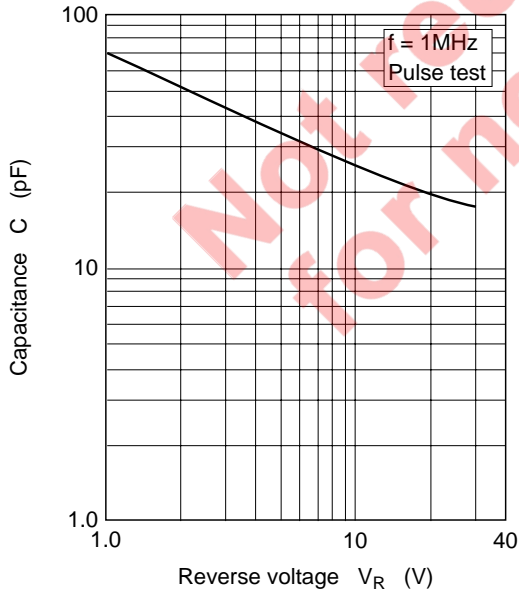


Fig.3 Capacitance vs. Reverse voltage

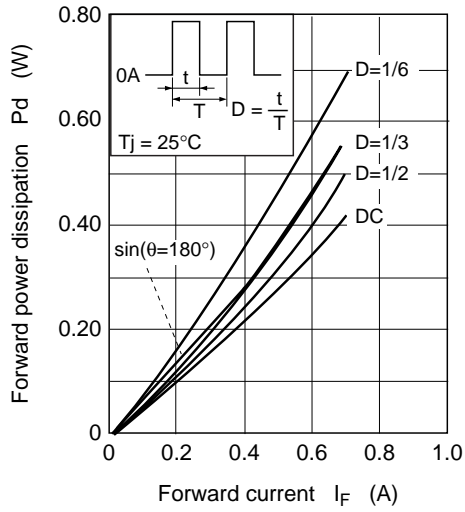


Fig.4 Forward power dissipation vs. Forward current

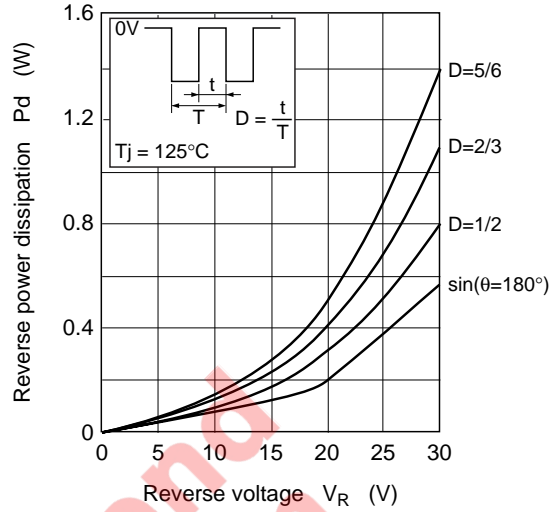


Fig.5 Reverse power dissipation vs. Reverse voltage

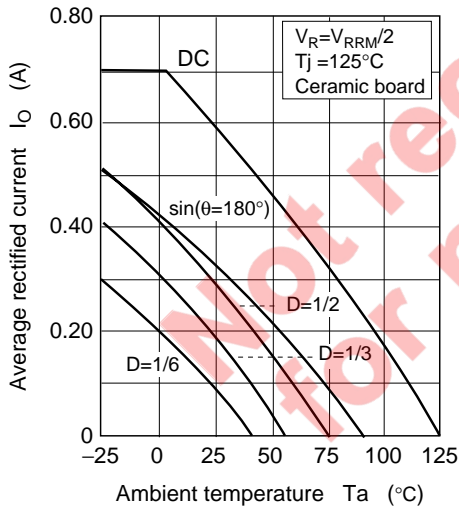


Fig.6 Average rectified current vs. Ambient temperature

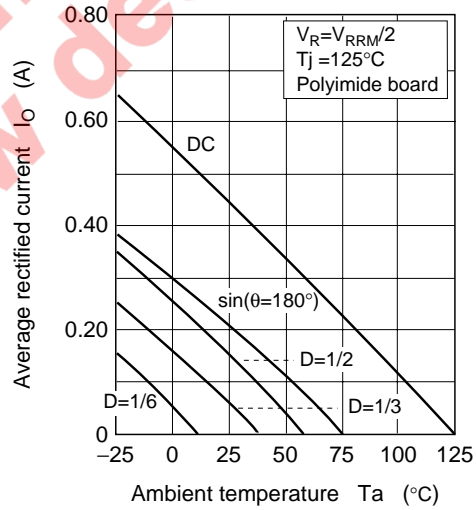
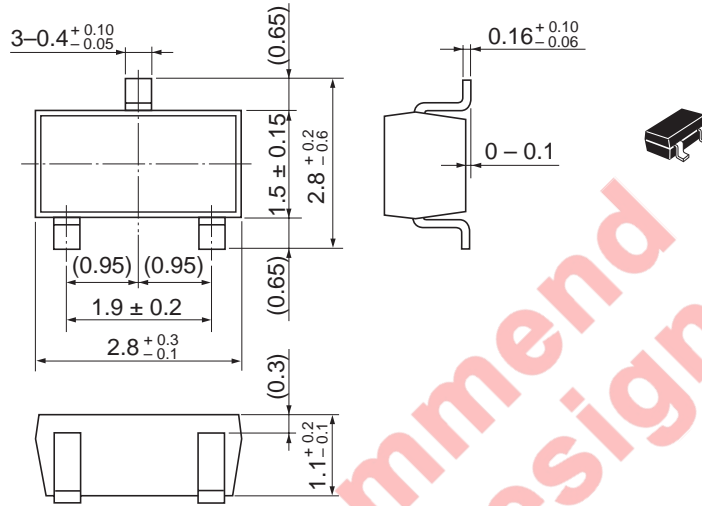


Fig.7 Average rectified current vs. Ambient temperature

Package Dimensions

As of January, 2003  
Unit: mm



Package Code	MPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.011 g

Not recommend for new design

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