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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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HRW0702A

Silicon Schottky Barrier Diode for Rectifying



ADE-208-109E(Z)

Rev. 5
Oct. 1997

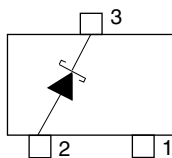
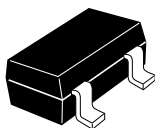
Features

- 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
HRW0702A	S15	MPAK

Pin Arrangement



(Top View)

- 1 NC
- 2 Anode
- 3 Cathode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}^{*1}	20	V
Forward current	I_F^{*1}	700	mA
Non-Repetitive peak forward current	I_{FM}	1.4	A
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.6

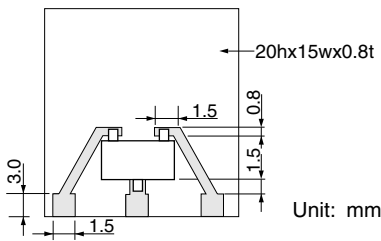
Notes 2. 10ms sine wave 1 pulse

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.43	V	$I_F = 700\text{ mA}$
Reverse current	I_R	—	—	200	μA	$V_R = 20\text{ V}$
Capacitance	C	—	120	—	pF	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$
Thermal resistance	$R_{th(j-a)}$	—	340	—	°C/W	Polyimide board ^{*1}

Notes 1. Polyimide board



Main Characteristic

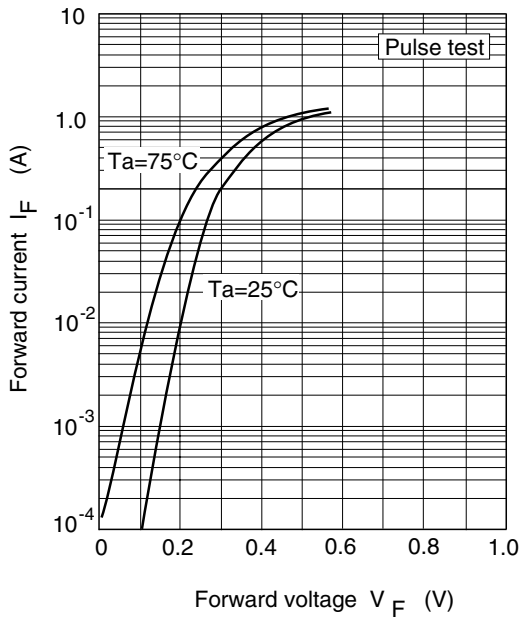


Fig.1 Forward current Vs. Forward voltage

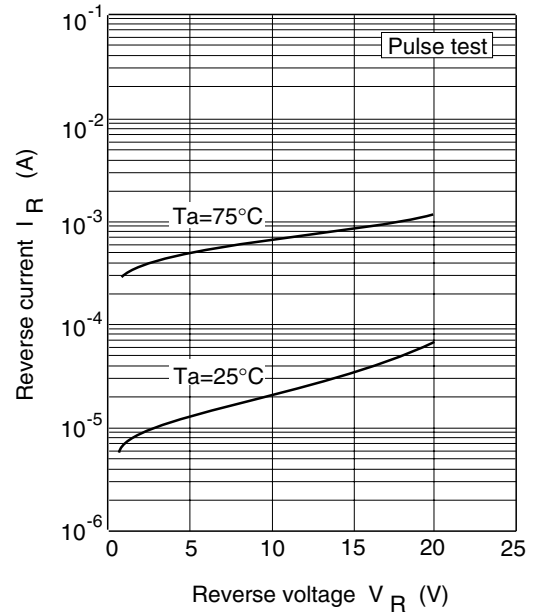


Fig.2 Reverse current Vs. Reverse voltage

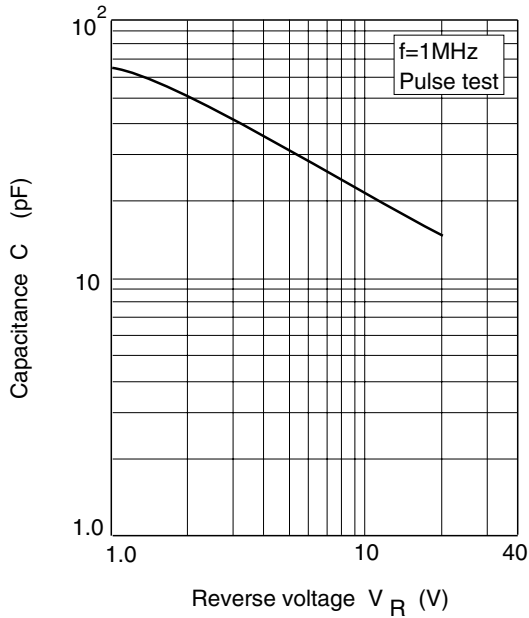


Fig.3 Capacitance Vs. Reverse voltage

Main Characteristic

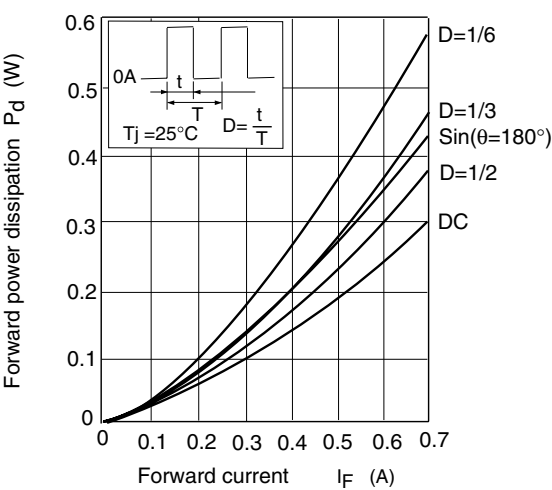


Fig4. Forward power dissipation Vs. Forward current

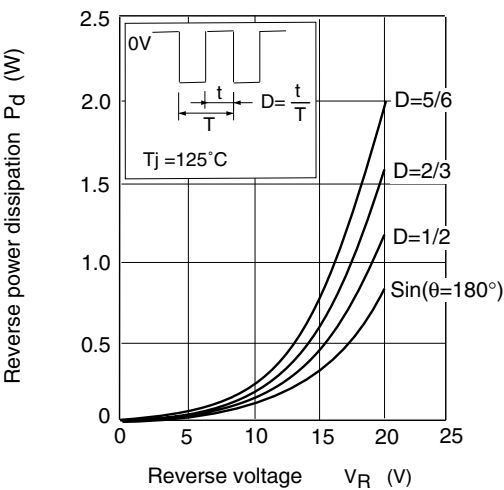


Fig5. Reverse power dissipation Vs. Reverse voltage

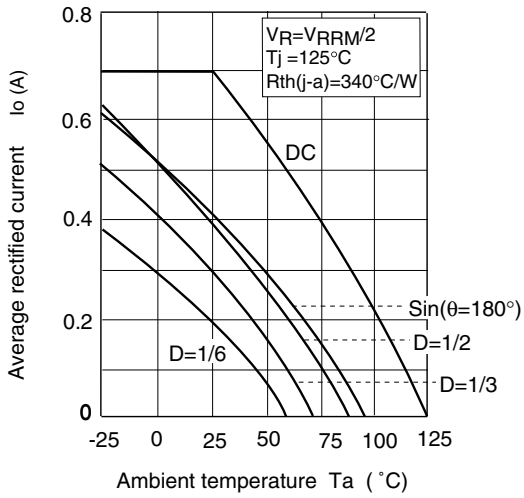
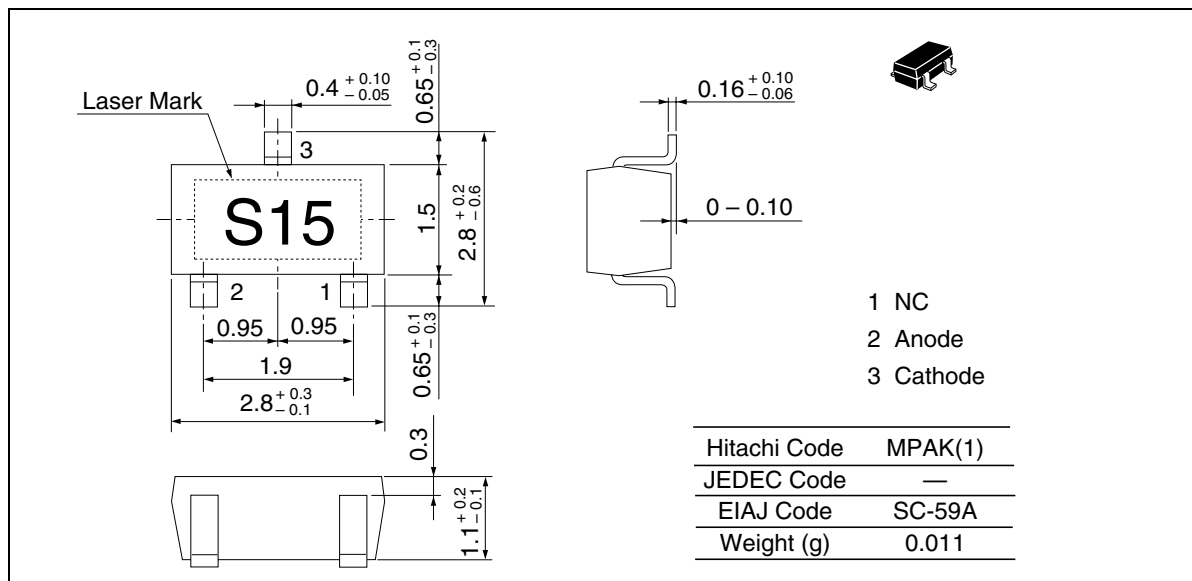


Fig.6 Average rectified current Vs. Ambient temperature

Package Dimensions

Unit : mm



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Sales Offices

HITACHI

Hitachi, Ltd.

Semiconductor & Integrated Circuits

Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

Tel: (03) 3270-2111 Fax: (03) 3270-5109

URL	NorthAmerica	:	http://semiconductor.hitachi.com/
	Europe	:	http://www.hitachi-eu.com/hel/ecg
	Asia	:	http://sicapac.hitachi-asia.com
	Japan	:	http://www.hitachi.co.jp/Sicd/indx.htm

For further information write to:

Hitachi Semiconductor (America) Inc.	Hitachi Europe Ltd.
179 East Tasman Drive	Electronic Components Group
San Jose, CA 95134	Whitebrook Park
Tel: <1> (408) 433-1990	Lower Cookham Road
Fax: <1> (408) 433-0223	Maidenhead
	Berkshire SL6 8YA, United Kingdom
	Tel: <44> (1628) 585000
	Fax: <44> (1628) 585200

Hitachi Europe GmbH
Electronic Components Group
Dornacher Straße 3
D-85622 Feldkirchen, Munich
Germany
Tel: <49> (89) 9 9180-0
Fax: <49> (89) 9 29 30 00

Hitachi Asia Ltd.
Hitachi Tower
16 Collyer Quay #20-00
Singapore 049318
Tel: <65>-538-6533/538-8577
Fax: <65>-538-6933/538-3877
URL: http://www.hitachi.com.sg

Hitachi Asia Ltd.
(Taipei Branch Office)
4/F, No. 167, Tun Hwa North Road
Hung-Kuo Building
Taipei (105), Taiwan
Tel: <886>-(2)-2718-3666
Fax: <886>-(2)-2718-8180
Telex: 23222 HAS-TP
URL: http://www.hitachi.com.tw

Hitachi Asia (Hong Kong) Ltd.
Group III (Electronic Components)
7/F., North Tower
World Finance Centre,
Harbour City, Canton Road
Tsim Sha Tsui, Kowloon
Hong Kong
Tel: <852>-(2)-735-9218
Fax: <852>-(2)-730-0281
URL: http://semiconductor.hitachi.com.hk

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