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

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HRC0103A

Silicon Schottky Barrier Diode for Rectifying



ADE-208-624 (Z)

Rev. 0
May. 1998

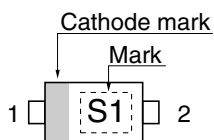
Features

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

Ordering Information

Type No.	Laser Mark	Package Code
HRC0103A	S1	UFP

Pin Arrangement



1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}^{*1}	30	V
Average rectified current	I_o^{*1}	100	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*2}	3	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

Note 1. See from Fig.3 to Fig.5

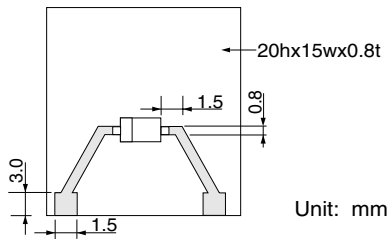
Note 2. 10msec sine wave 1 pulse

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.44	V	$I_F = 100\text{ mA}$
Reverse current	I_R	—	—	50	μA	$V_R = 30\text{V}$
Thermal resistance	$R_{th(j-a)}$	—	500	—	°C/W	Polyimide board ^{*1}

Note 1. Polyimide board



Main Characteristic

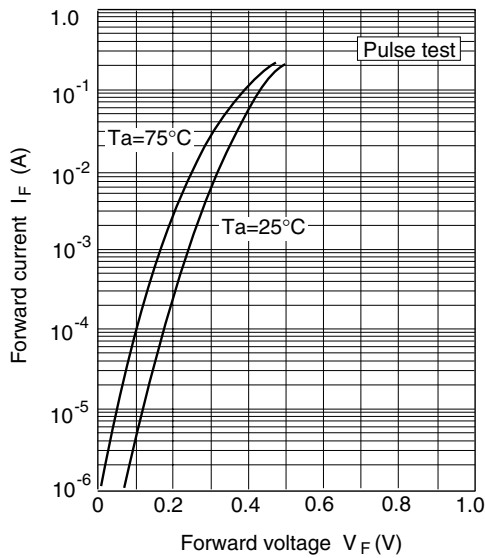


Fig.1 Forward current Vs. Forward voltage

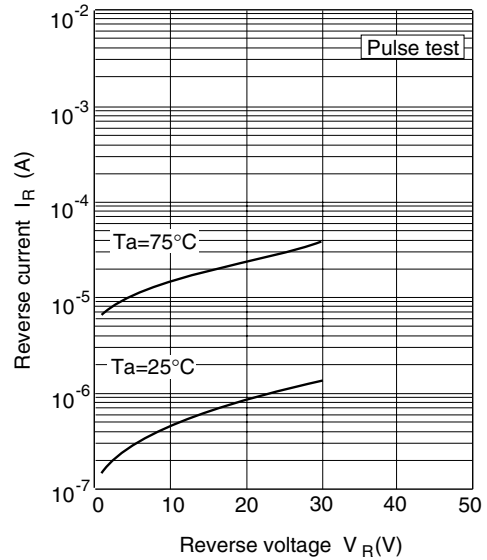


Fig.2 Reverse current Vs. Reverse voltage

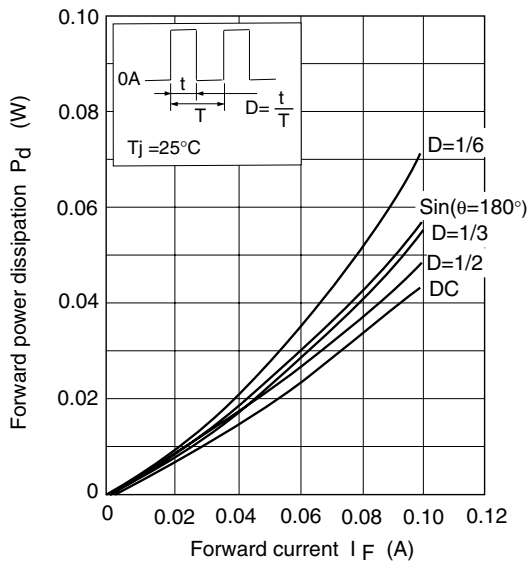


Fig.3 Forward power dissipation Vs. Forward current

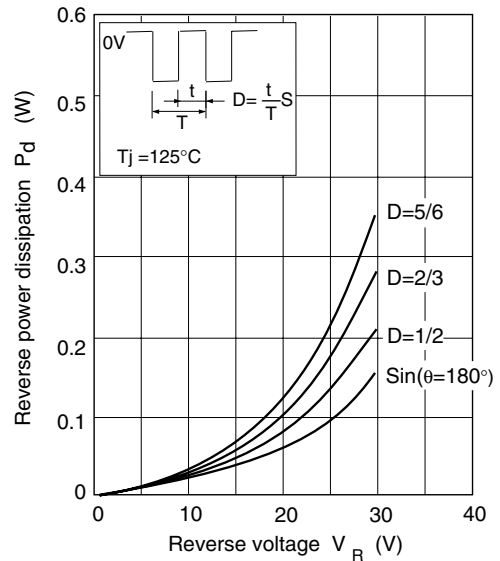


Fig.4 Reverse power dissipation Vs. Reverse voltage

Main Characteristic

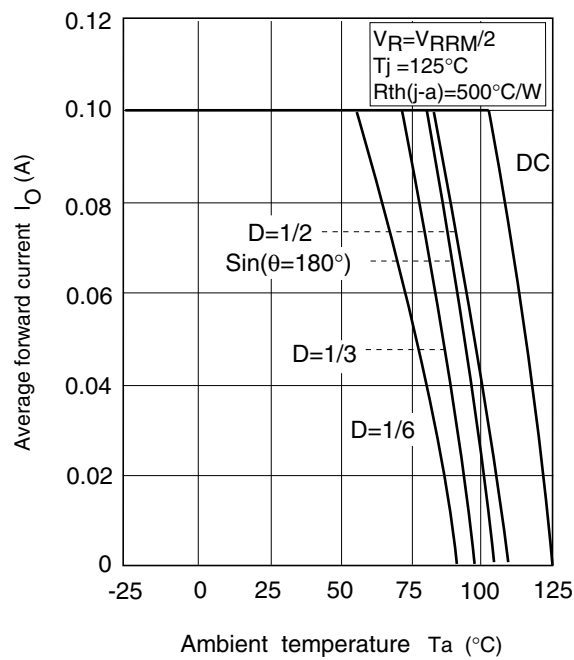
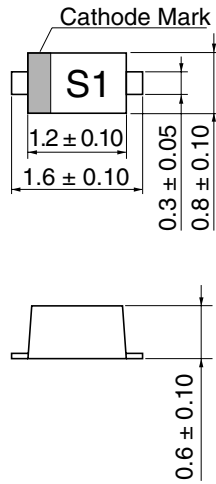


Fig.5 Average forward current Vs. Ambient temperature

Package Dimensions

Unit : mm



- 1 Cathode
2 Anode

HITACHI Code	UFP
JEDEC Code	—
EIAJ Code	SC-79
Weight (g)	0.0016

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