

**RENESAS**

# HRC0103C

## Silicon Schottky Barrier Diode for Rectifying

REJ03G0069-0100Z  
(Previous: ADE-208-1598)  
Rev.1.00  
Aug.29.2003

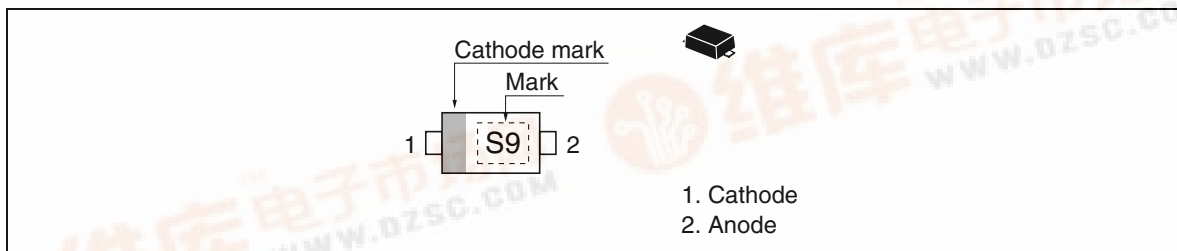
### Features

- 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
HRC0103C	S9	UFP

### Pin Arrangement



## HRC0103C

### Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}^{*1}$	30	V
Reverse voltage	$V_R$	30	V
Average rectified current	$I_O^{*1}$	100	mA
Peak forward surge current	$I_{FM}$	300	mA
Non-Repetitive peak forward surge current	$I_{FSM}^{*2}$	1	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

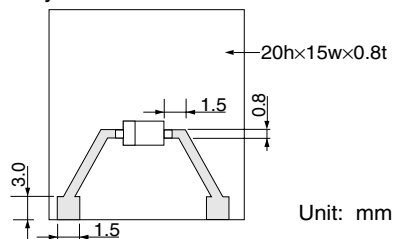
Notes: 1. See from Fig.3 to Fig.5.  
2. 10 ms sine wave 1 pulse.

### Electrical Characteristics

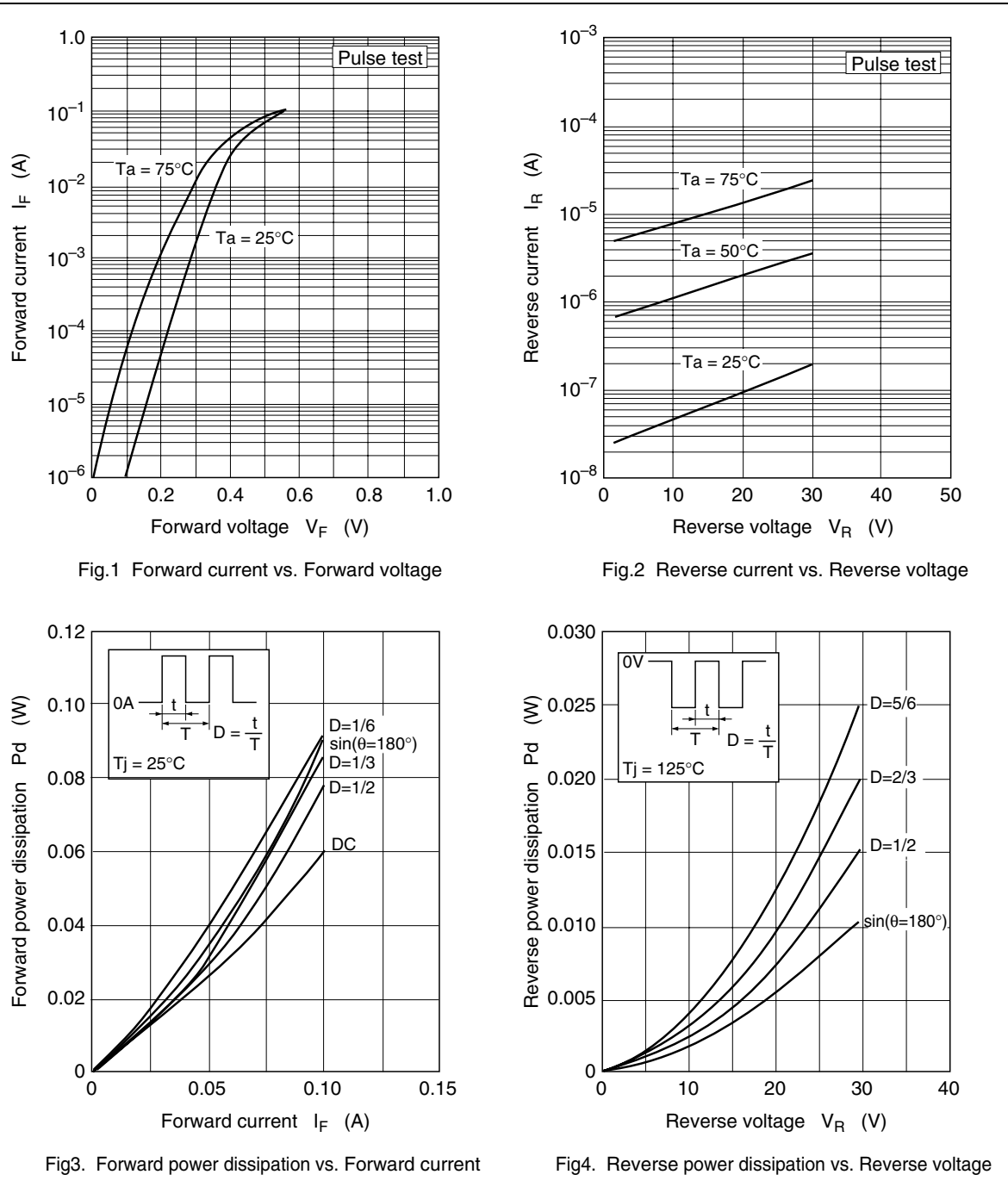
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	—	—	0.4	V	$I_F = 10 \text{ mA}$
	$V_{F2}$	—	—	0.6		$I_F = 100 \text{ mA}$
Reverse current	$I_{R1}$	—	—	0.1	μA	$V_R = 5 \text{ V}$
	$I_{R2}$	—	—	0.2		$V_R = 10 \text{ V}$
Capacitance	C	—	—	8.0	pF	$V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$
Thermal resistance	Rth(j-a)	—	550	—	°C/W	Polyimide board <sup>*1</sup>

Note: 1. Polyimide board



Main Characteristics



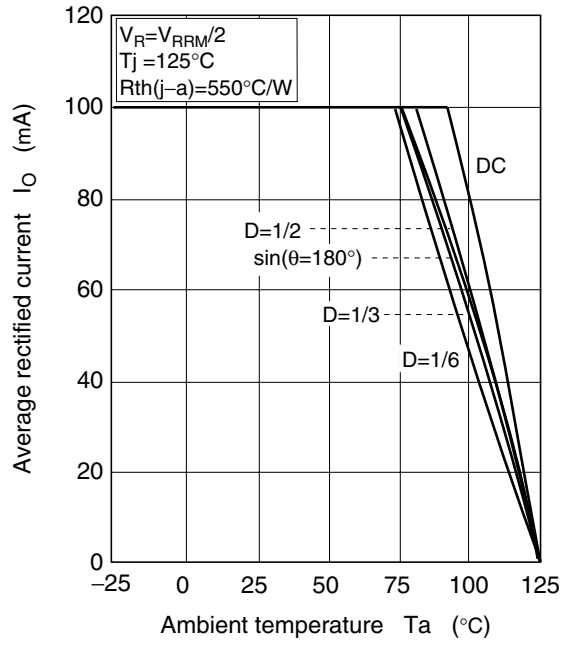
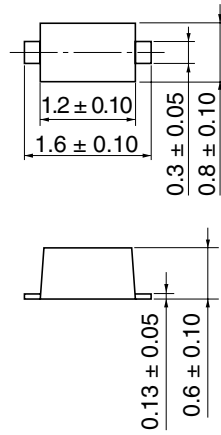


Fig.5 Average rectified current vs. Ambient temperature

Package Dimensions

As of January, 2003  
Unit: mm



Package Code	UFP
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.0016 g

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