To all our customers

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

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HRD0203C

Silicon Schottky Barrier Diode for Rectifying

ADE-208-1558 (Z)

Rev.0
Nov. 2002

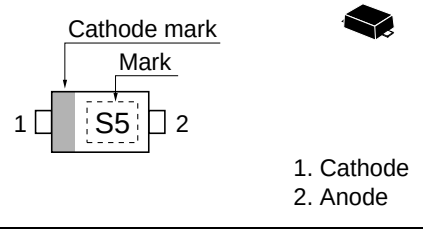
Features

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

Ordering Information

Type No.	Laser Mark	Package Code
HRD0203C	S5	SFP

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	200	mA
Non-Repetitive peak forward surge current	I_{FSM} *2	2	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

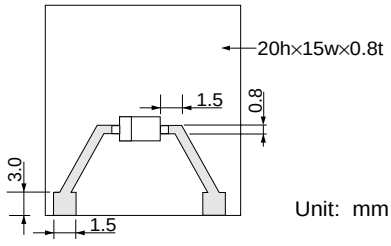
Notes: 1. See from Fig.3 to Fig.5, with polyimide board.
2. 10 ms sine wave 1 pulse.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	0.25	V	I_F = 5 mA
	V_{F2}	—	—	0.45		I_F = 200 mA
Reverse current	I_R	—	—	30	µA	V_R = 10 V
Thermal resistance	Rth(j-a)	—	600	—	°C/W	Polyimide board *1

Note: 1. Polyimide board



Main Characteristic

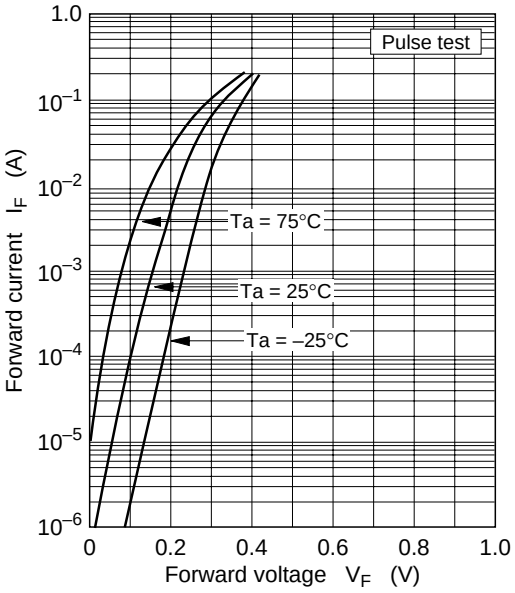


Fig.1 Forward current vs. Forward voltage

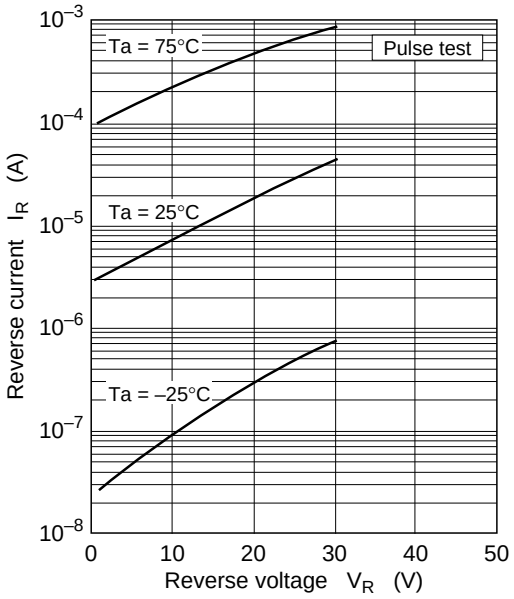


Fig.2 Reverse current vs. Reverse voltage

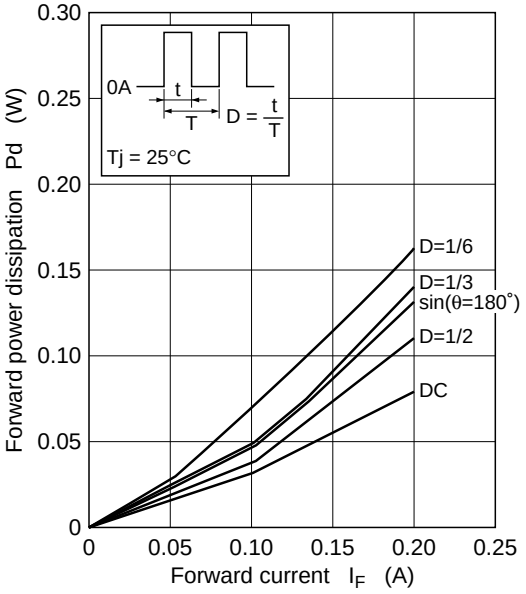


Fig3. Forward power dissipation vs. Forward current

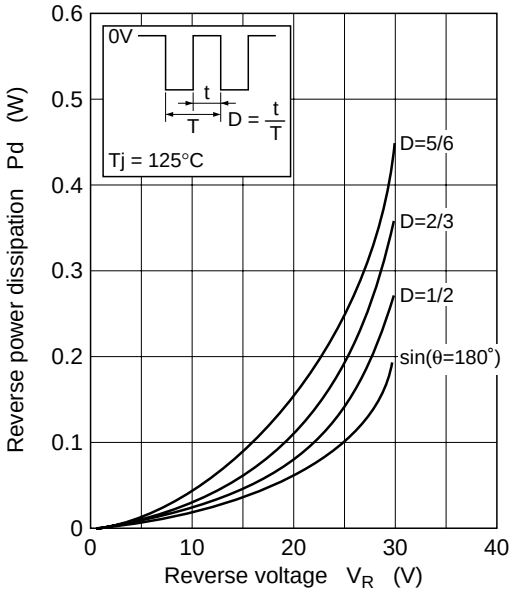


Fig4. Reverse power dissipation vs. Reverse voltage

Main Characteristic (cont)

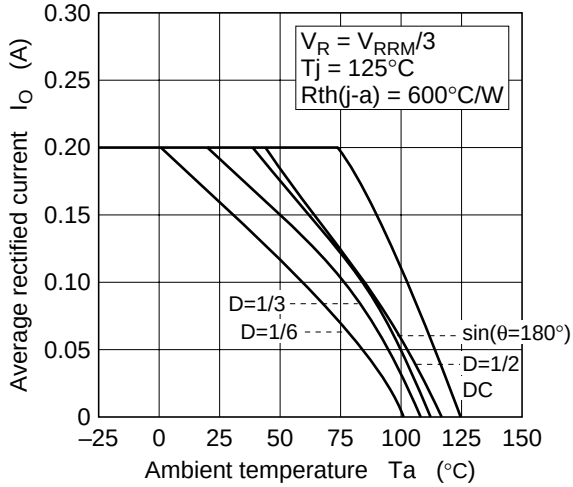


Fig.5 Average rectified current vs. Ambient temperature

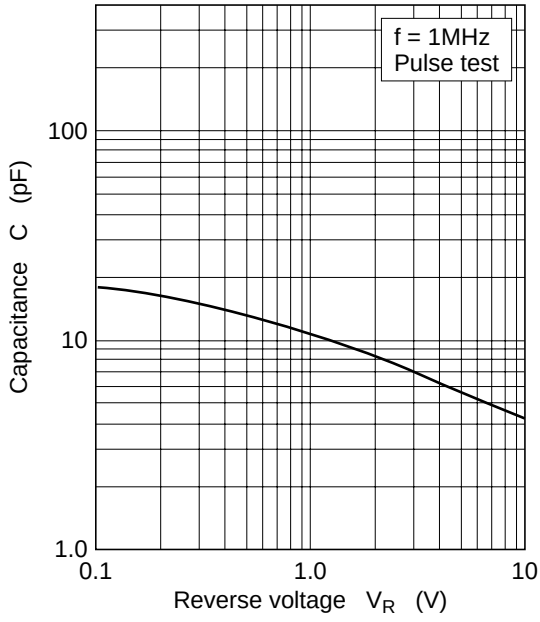
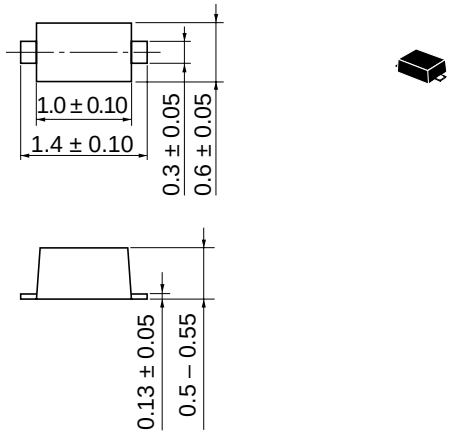


Fig.6 Capacitance vs. Reverse voltage

Package Dimensions

As of July, 2002

Unit: mm



Hitachi Code	SFP
JEDEC	—
JEITA	—
Mass (reference value)	0.0010 g

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