

## HRD0103C

### Silicon Schottky Barrier Diode for Rectifying

REJ03G0070-0100Z  
(Previous: ADE-208-1614)  
Rev.1.00  
Aug.29.2003

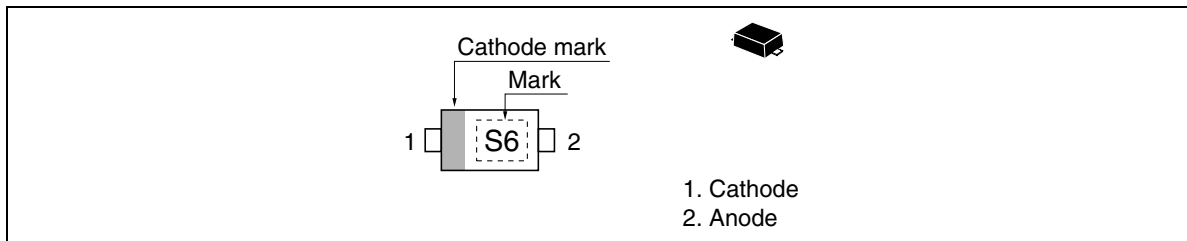
#### Features

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

#### Ordering Information

Type No.	Laser Mark	Package Code
HRD0103C	S6	SFP

#### Pin Arrangement



### 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

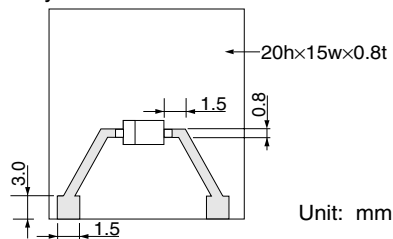
Notes: 1. See from Fig.3 to Fig.5.  
 2. 10 ms sine wave 1 pulse.

### 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)	—	600	—	°C/W	Polyimide board <sup>*1</sup>

Note: 1. Polyimide board



2. Please do not use the soldering iron due to avoid high stress to the SFP package.

Main Characteristics

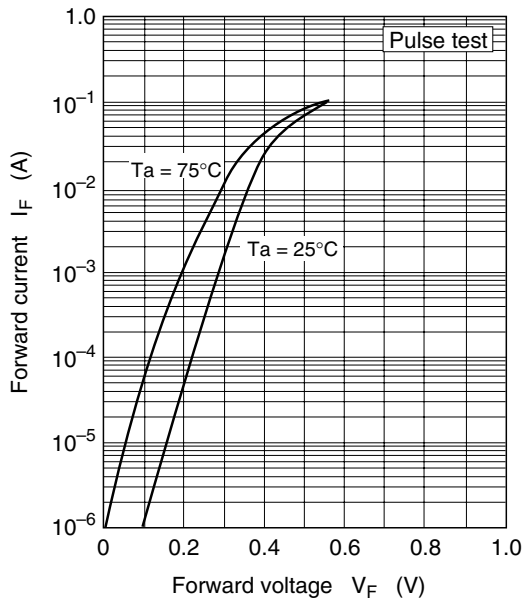


Fig.1 Forward current vs. Forward voltage

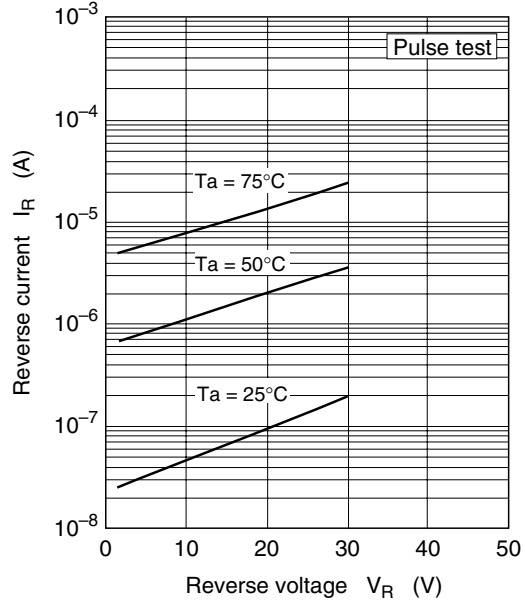


Fig.2 Reverse current vs. Reverse voltage

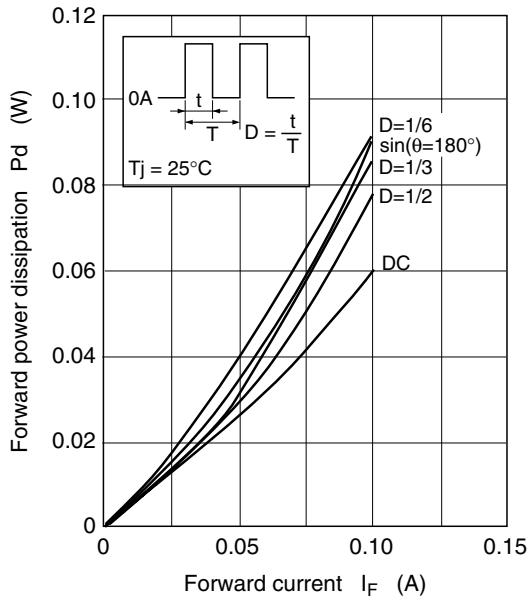


Fig3. Forward power dissipation vs. Forward current

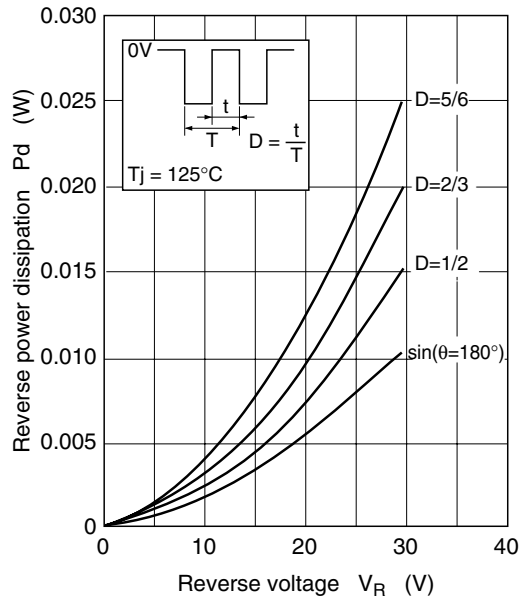


Fig4. Reverse power dissipation vs. Reverse voltage

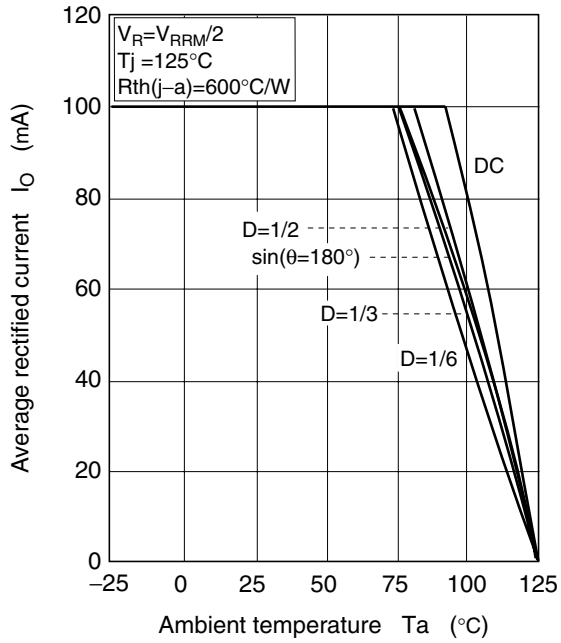
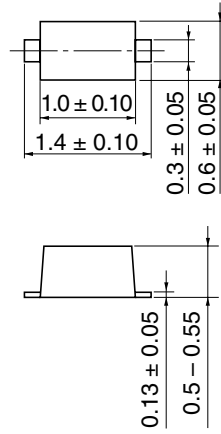


Fig.5 Average rectified current vs. Ambient temperature

Package Dimensions

As of January, 2003  
Unit: mm



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

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