HRD0103C

Silicon Schottky Barrier Diode for Rectifying

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

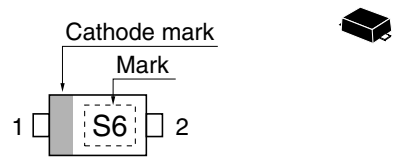
Features

- 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



1. Cathode
2. Anode

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

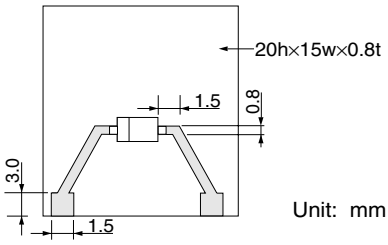
Notes: 1. See from Fig.3 to Fig.5.
2. 10 ms sine wave 1 pulse.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	0.4	V	I_F = 10 mA
	V_{F2}	—	—	0.6		I_F = 100 mA
Reverse current	I_{R1}	—	—	0.1	μA	V_R = 5 V
	I_{R2}	—	—	0.2		V_R = 10 V
Capacitance	C	—	—	8.0	pF	V_R = 0.5 V, f = 1 MHz
Thermal resistance	Rth(j-a)	—	600	—	°C/W	Polyimide board *1

Note: 1. Polyimide board



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

Main Characteristics

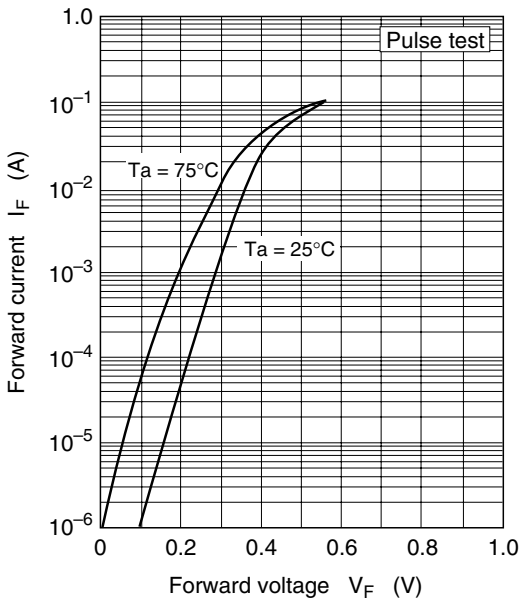


Fig.1 Forward current vs. Forward voltage

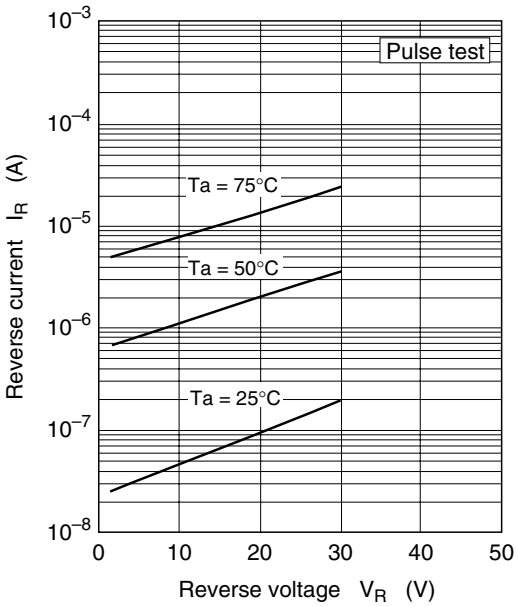


Fig.2 Reverse current vs. Reverse voltage

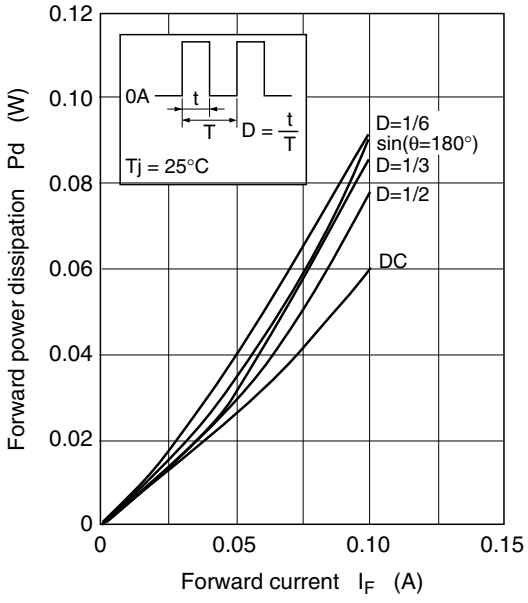


Fig3. Forward power dissipation vs. Forward current

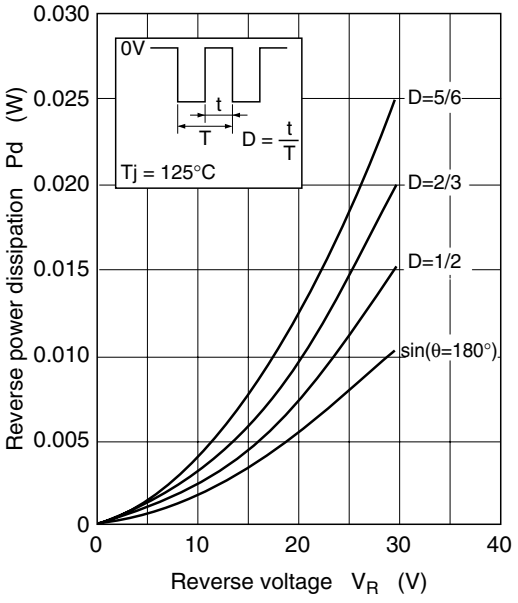


Fig4. Reverse power dissipation vs. Reverse voltage

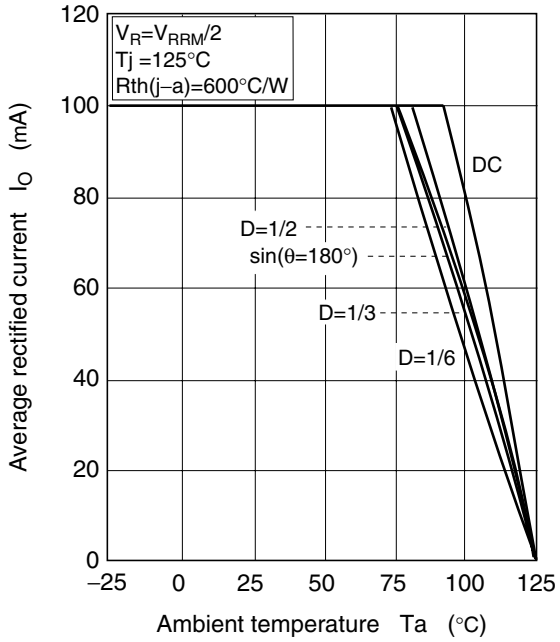
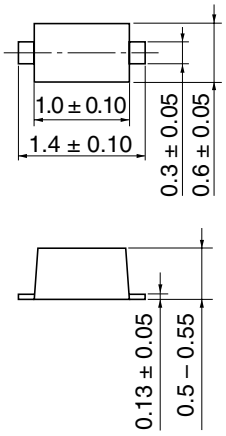


Fig.5 Average rectified current vs. Ambient temperature

Package Dimensions

As of January, 2003

Unit: mm



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

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