HRW0703A

Silicon Schottky Barrier Diode for Rectifying

REJ03G0160-0600Z
(Previous: ADE-208-110E)
Rev.6.00
Jan.06.2004

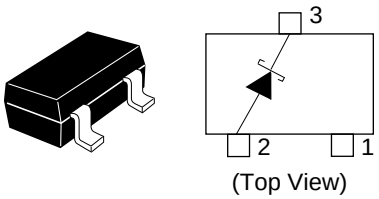
Features

- Low forward voltage drop and suitable for high efficiency rectifying.
- MPAK Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HRW0703A	S8	MPAK

Pin Arrangement



(Top View)

1. NC
2. Anode
3. Cathode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM} *1	30	V
Forward current	I_F *1	700	mA
Non-Repetitive peak forward surge current	I_{FSM} *2	5	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

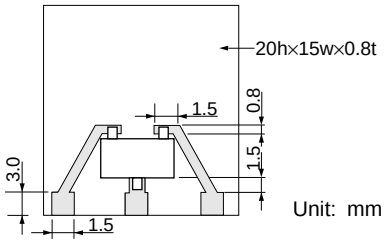
Notes: 1. See from Fig.4 to Fig.7.
2. 50 Hz sine wave 1 pulse

Electrical Characteristics

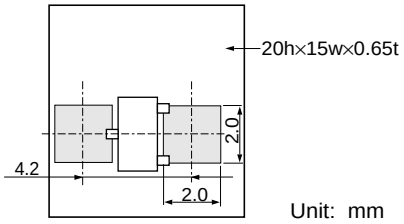
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.5	V	I_F = 700 mA
Reverse current	I_R	—	—	100	µA	V_R = 30 V
Capacitance	C	—	150	—	pF	V_R = 0 V, f = 1 MHz
Thermal resistance	Rth1(j-a)	—	390	—	°C/W	Polyimide board *1
	Rth2(j-a)	—	290	—	°C/W	Ceramic board *2

Notes: 1. Polyimide board



2. Ceramic board



Main Characteristic

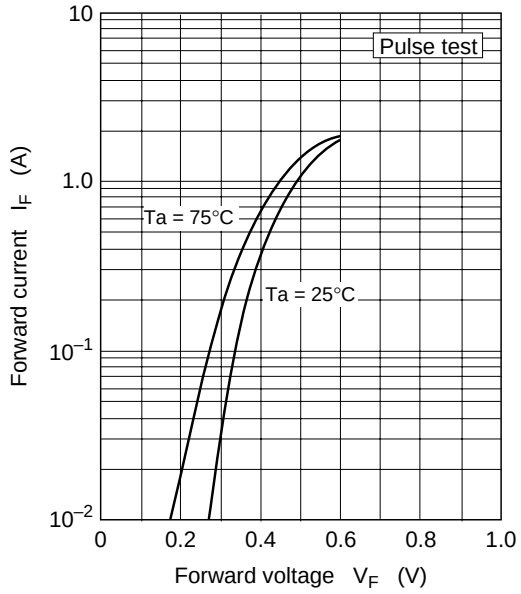


Fig.1 Forward current vs. Forward voltage

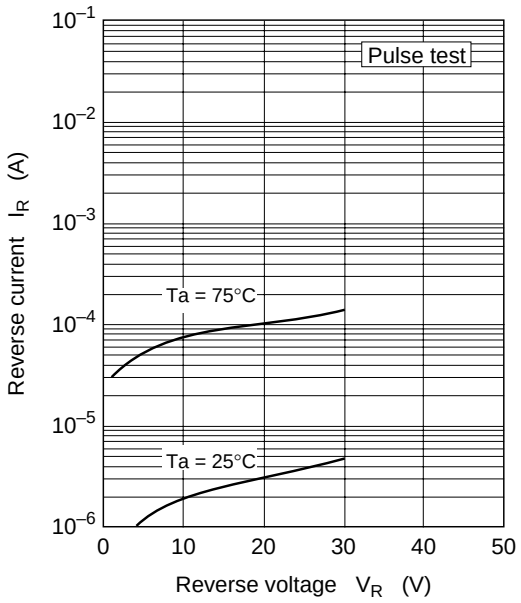


Fig.2 Reverse current vs. Reverse voltage

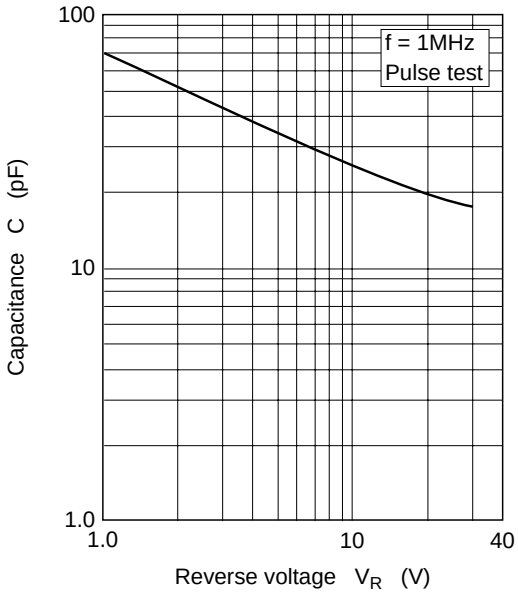


Fig.3 Capacitance vs. Reverse voltage

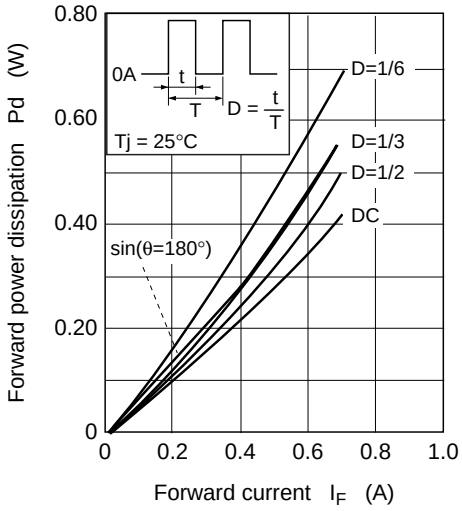


Fig.4 Forward power dissipation vs. Forward current

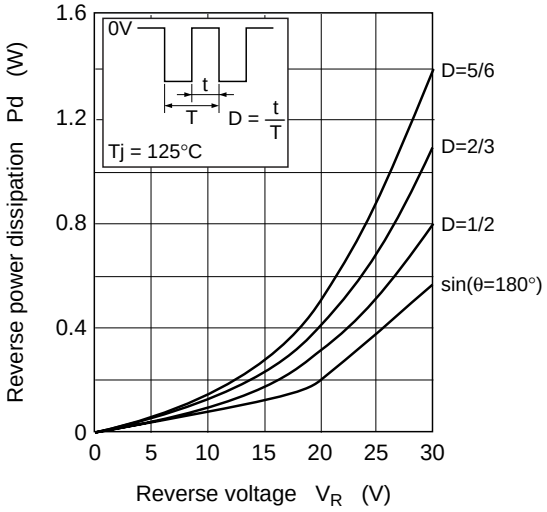


Fig.5 Reverse power dissipation vs. Reverse voltage

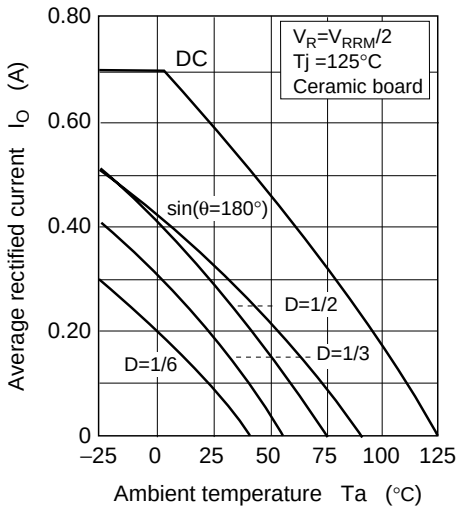


Fig.6 Average rectified current vs. Ambient temperature

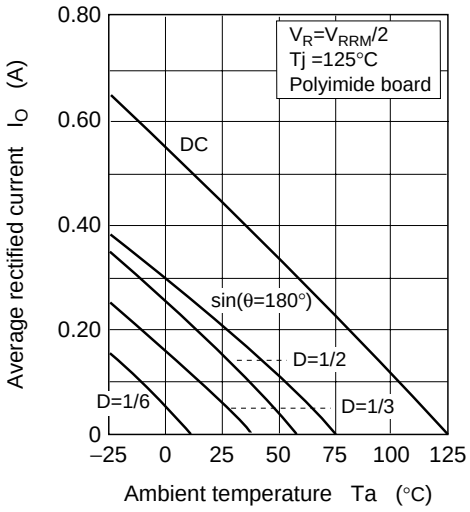
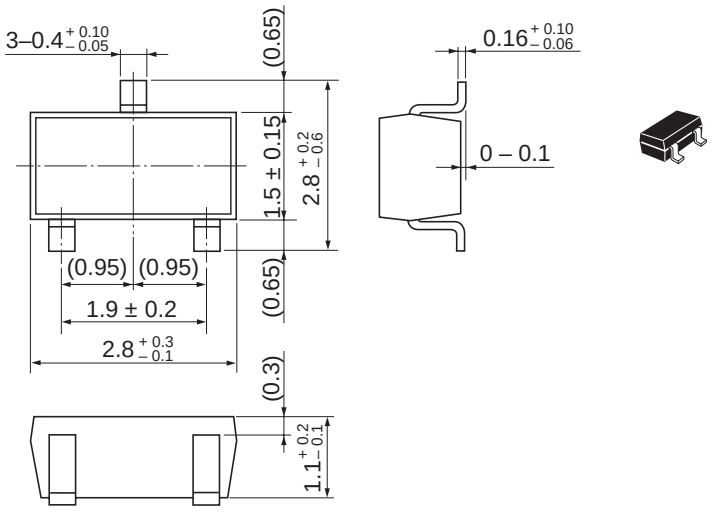


Fig.7 Average rectified current vs. Ambient temperature

Package Dimensions

As of January, 2003
Unit: mm



Package Code	MPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.011 g

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