

HRW0703A

Silicon Schottky Barrier Diode for Rectifying

HITACHI

ADE-208-110E (Z)

Rev 5

Oct. 1997

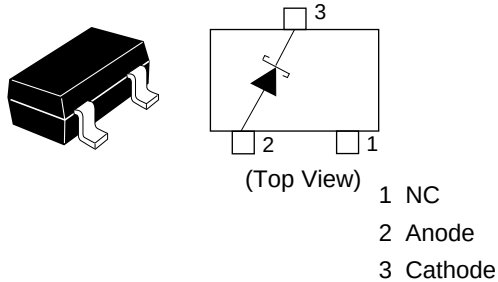
Features

- 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

Outline



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

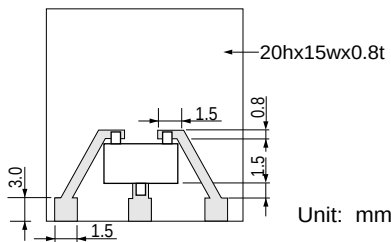
Note 1. See from Fig.4 to Fig.7, with polyimide board

Note 2. 50Hz sine wave 1 pulse

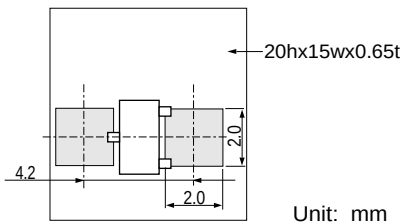
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.50	V	$I_F = 700\text{ mA}$
Reverse current	I_R	—	—	100	μA	$V_R = 30\text{ V}$
Capacitance	C	—	150	—	pF	$V_R = 0\text{ V}, f = 1\text{ MHz}$
Thermal resistance	Rth1(j-a)		390		°C/W	Polyimide board ^{*1}
	Rth2(j-a)		290		°C/W	Ceramic board ^{*2}

Note 1. Polyimide board



Note 2. Ceramic board



Main Characteristic

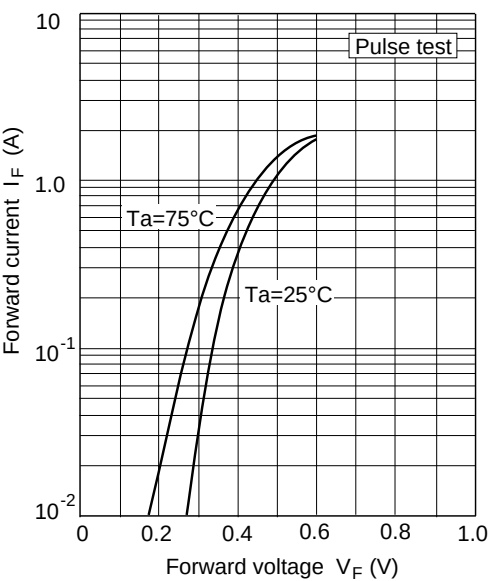


Fig.1 Forward current Vs. Forward voltage

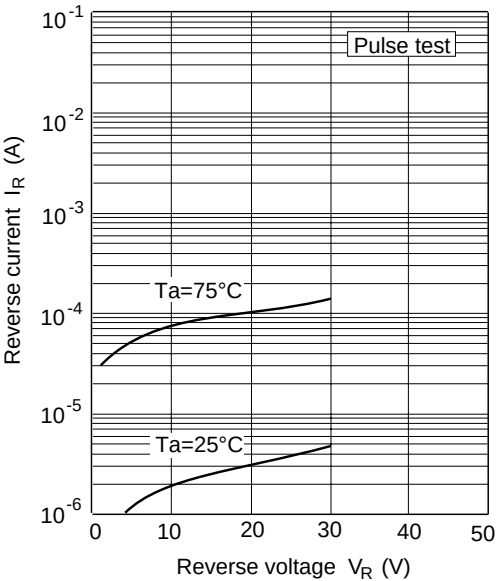


Fig.2 Reverse current Vs. Reverse voltage

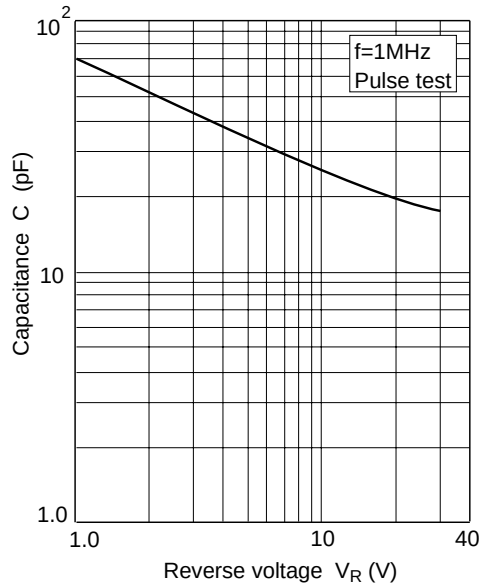


Fig.3 Capacitance Vs. Reverse voltage

Main Characteristic

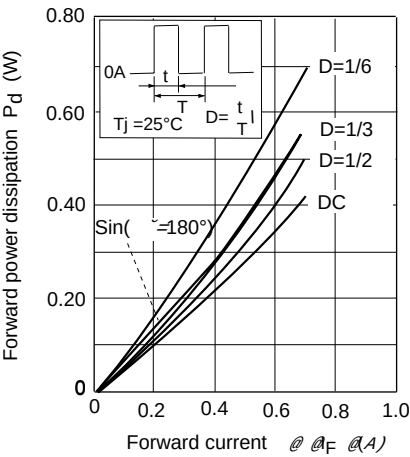


Fig4. Forward power dissipation Vs. Forward current

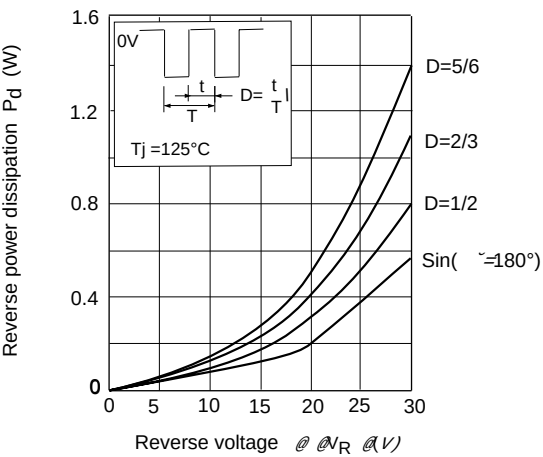


Fig5. Reverse power dissipation Vs. Reverse voltage

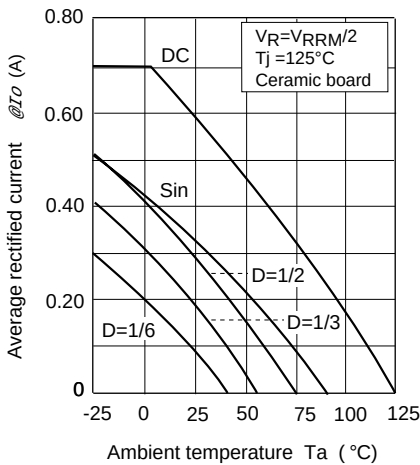


Fig.6 Average rectified current Vs. Ambient temperature

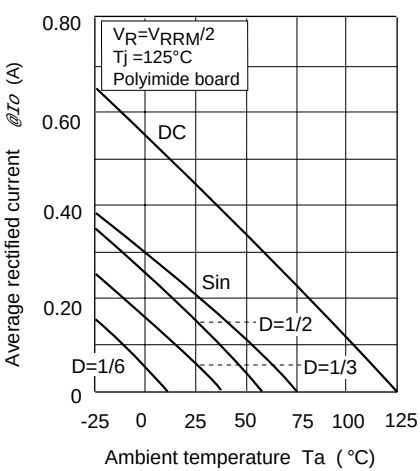
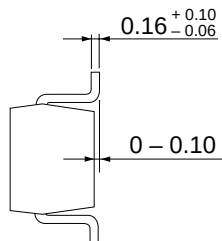
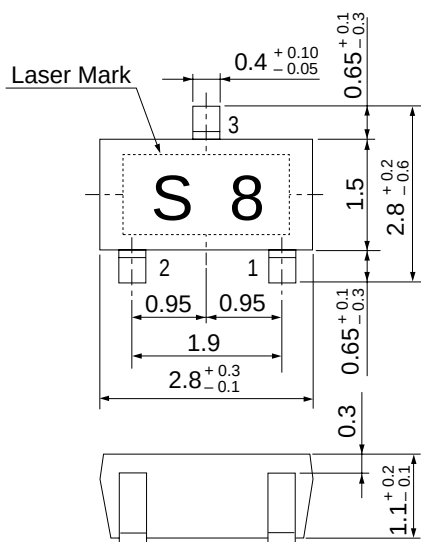


Fig.7 Average rectified current Vs. Ambient temperature

Package Dimensions

Unit : mm



- 1 NC
- 2 Anode
- 3 Cathode

Hitachi Code	MPAK(1)
JEDEC Code	—
EIAJ Code	SC-59A
Weight (g)	0.011

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