

HRW0502A

Silicon Schottky Barrier Diode for Rectifying

HITACHI

ADE-208-108E(Z)

Rev 5

Oct. 1997

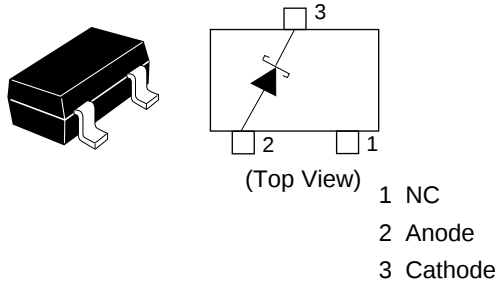
Features

- 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
HRW0502A	S10	MPAK

Outline



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}^{*1}	20	V
Average rectified current	I_O^{*1}	500	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*2}	5	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

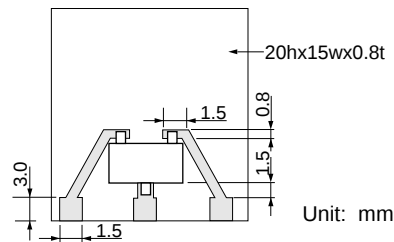
Notes 1. See from Fig.4 to Fig.6

Notes 2. 10msec sine wave 1 pulse

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V _F	—	—	0.4	V	I _F = 500 mA
Reverse current	I _R	—	—	200	μA	V _R = 20V
Capacitance	C	—	120	—	pF	V _R = 0V, f = 1 MHz
Thermal resistance	R _{th(j-a)}	—	340	—	°C/W	Polyimide board ^{†1}

Notes 1. Polyimide board



Main Characteristic

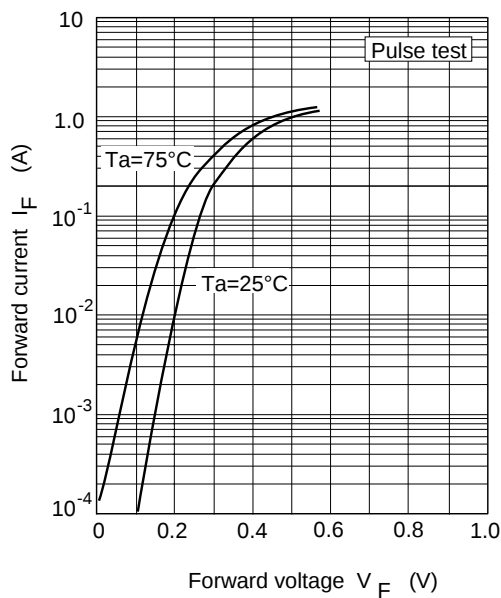


Fig.1 Forward current Vs. Forward voltage

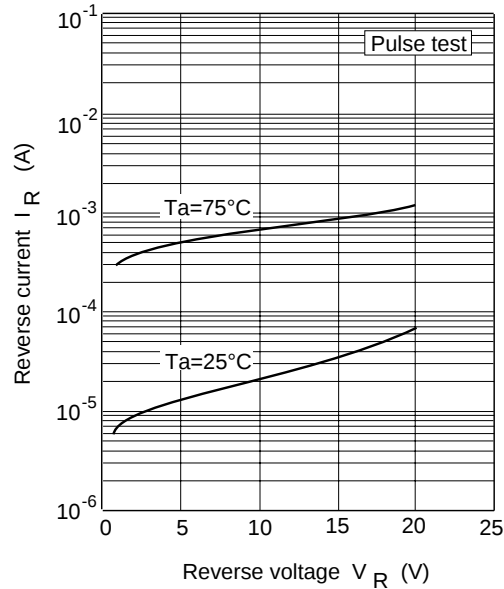


Fig.2 Reverse current Vs. Reverse voltage

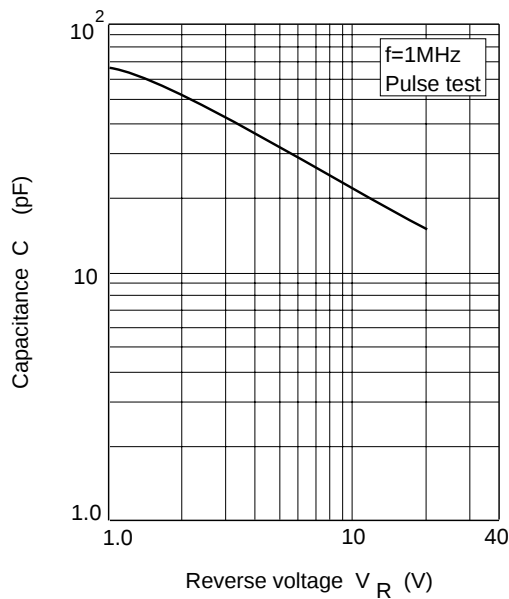


Fig.3 Capacitance Vs. Reverse voltage

Main Characteristic

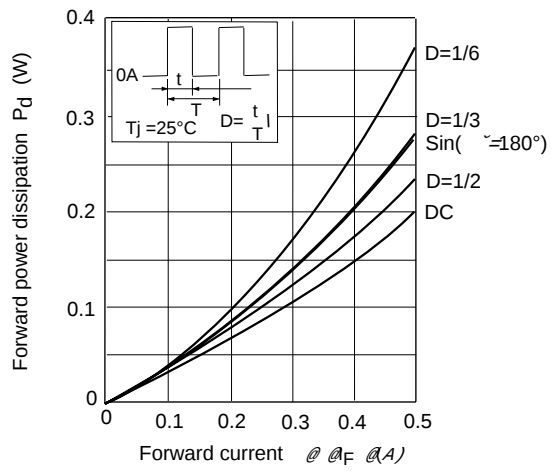


Fig4. Forward power dissipation Vs. Forward current

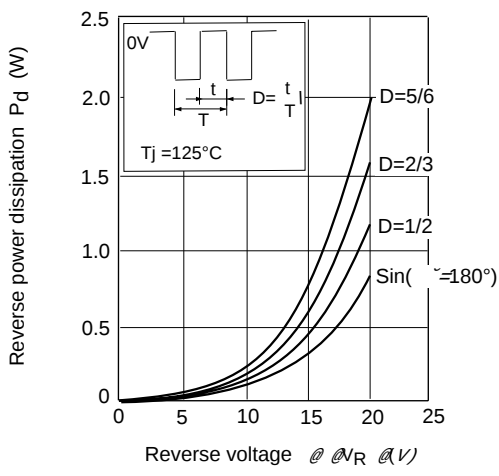


Fig5. Reverse power dissipation Vs. Reverse voltage

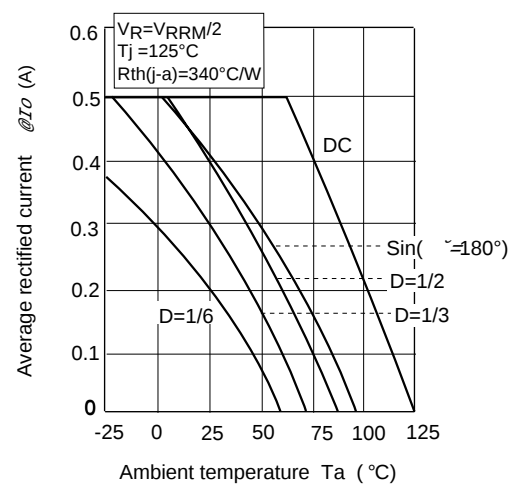
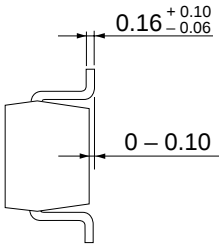
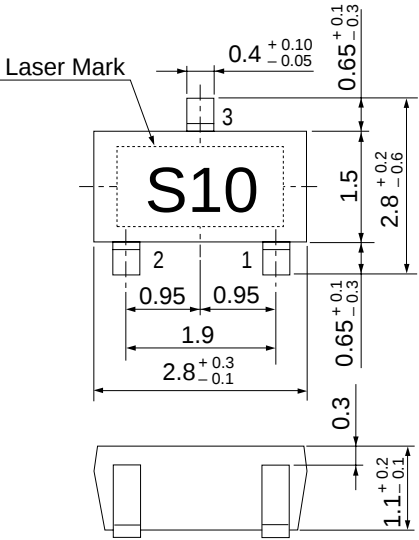


Fig.6 Average rectified current Vs. Ambient temperature

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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