

# HRW0503A

Silicon Schottky Barrier Diode for Rectifying

# HITACHI

ADE-208-016C (Z)

Rev 3

Oct. 1997

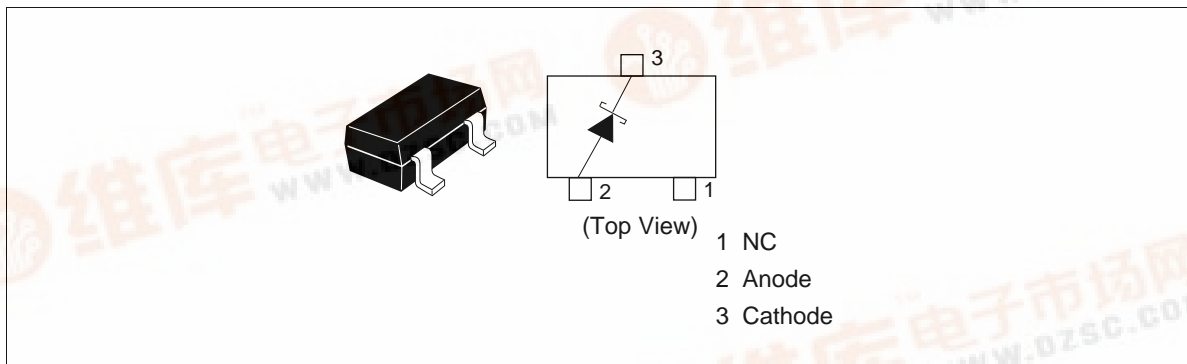
## Features

- 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
HRW0503A	S6	MPAK

## Outline



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## HRW0503A

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### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}^{*1}$	30	V
Average rectified current	$I_o^{*1}$	500	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.1 to Fig.5, 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	$V_F$	—	—	0.55	V	$I_F = 500 \text{ mA}$
Reverse current	$I_R$	—	—	50	$\mu\text{A}$	$V_R = 30\text{V}$
Capacitance	C	—	65	—	pF	$V_R = 0\text{V}, f = 1\text{MHz}$

Main Characteristic

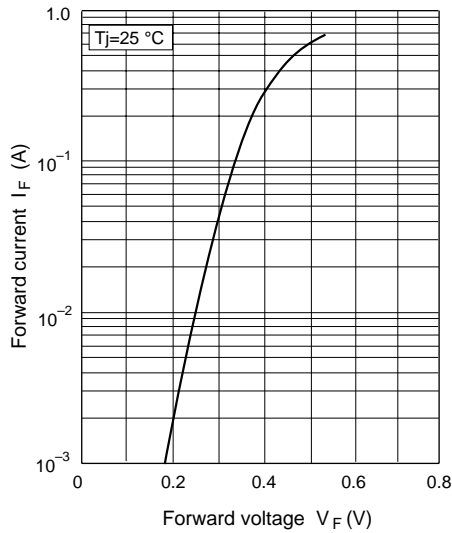


Fig.1 Forward current Vs. Forward voltage

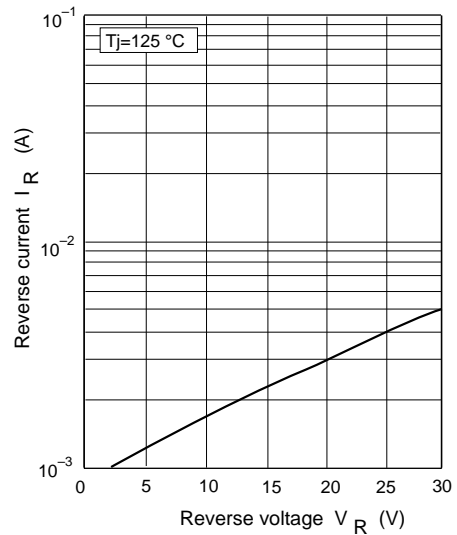


Fig.2 Reverse current Vs. Reverse voltage

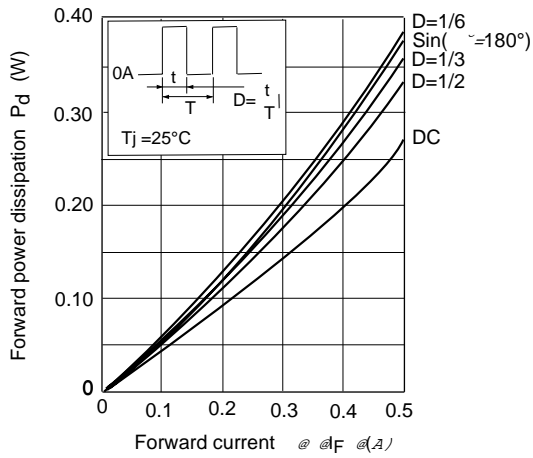


Fig.3. Forward power dissipation Vs. Forward current

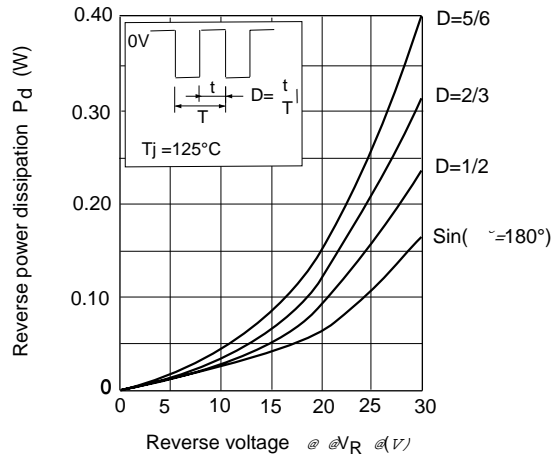


Fig.4. Reverse power dissipation Vs. Reverse voltage

# HRW0503A

## Main Characteristic

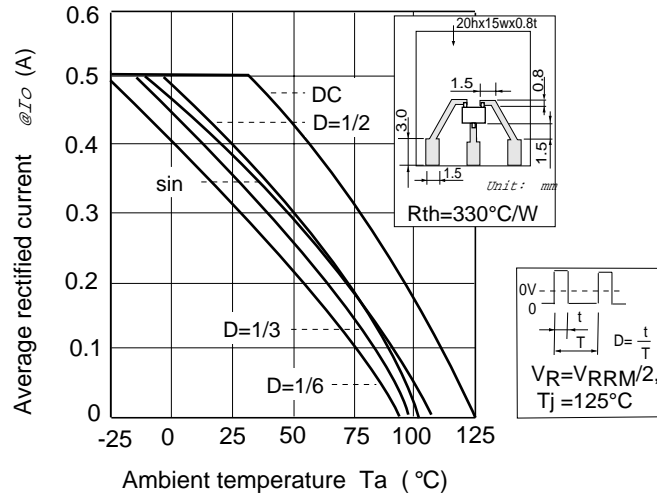


Fig.5 Average rectified current Vs. Ambient temperature

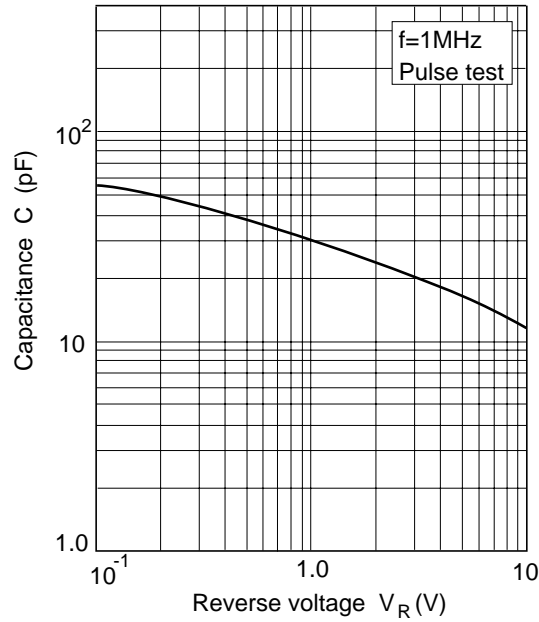
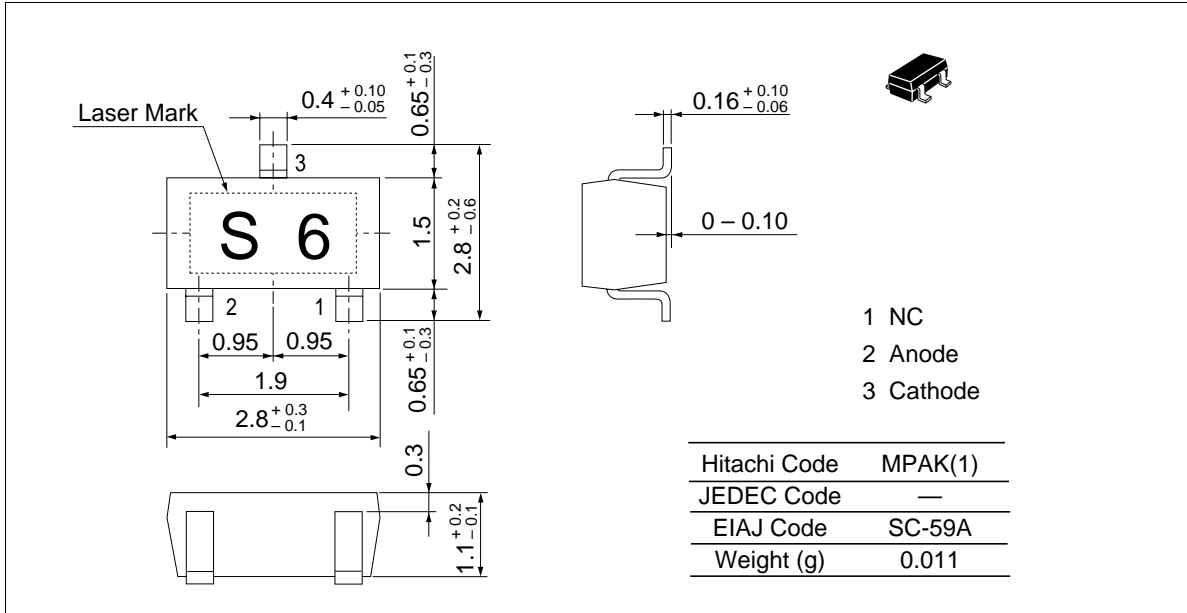


Fig.6 Capacitance Vs. Reverse voltage

Package Dimensions

Unit : mm



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