ADE-208-110D(Z)

HRW0703A
Silicon Schottky Barrier Diode for Rectifying

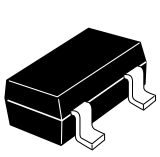
HITACHI

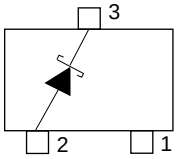
Rev. 4
Nov. 1994

Features

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

Pin Arrangement





(Top View)

1 NC
2 Anode
3 Cathode

Ordering Information

Type No.	Laser Mark	Package Code
HRW0703A	S 8	MPAK

Absolute Maximum Ratings (Ta = 25°C)

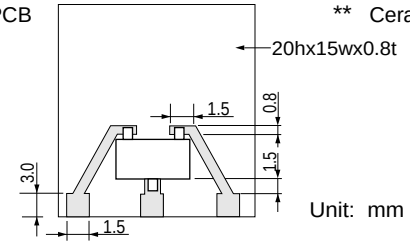
Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}*	30	V
Forward current	I_F*	700	mA
Non-Repetitive peak forward surge current	I_{FSM}**	5	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

* See Fig.4 & Fig.5 ** 50Hz sine wave 1 pulse

Electrical Characteristics (Ta = 25°C)

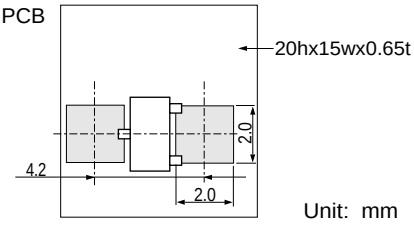
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I_R	—	—	100	µA	V_R = 30 V
Forward voltage	V_F	—	—	0.5	V	I_F = 700 mA
Capacitance	C	—	150	—	pF	V_R= 0V, f= 1MHz
Thermal resistance	$R_{th1(j-a)}$	—	390	—	°C/W	Polyimide substrate *
	$R_{th2(j-a)}$	—	290	—	°C/W	Ceramic substrate **

* Polyimide PCB



Unit: mm

** Ceramic PCB



Unit: mm

HRW0703A

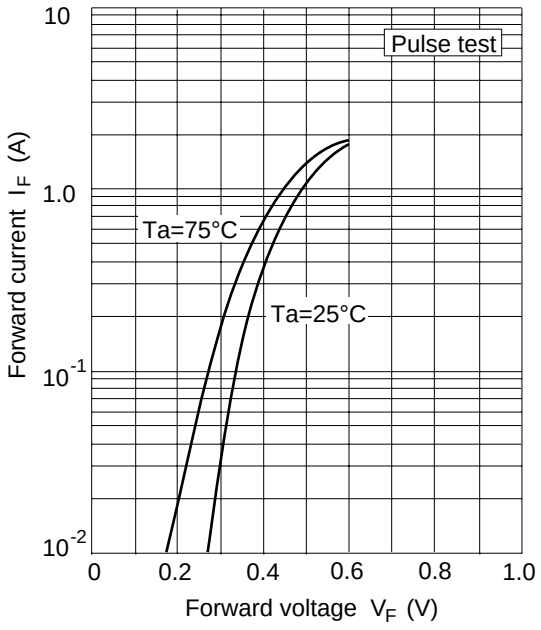


Fig.1 Forward current Vs. Forward voltage

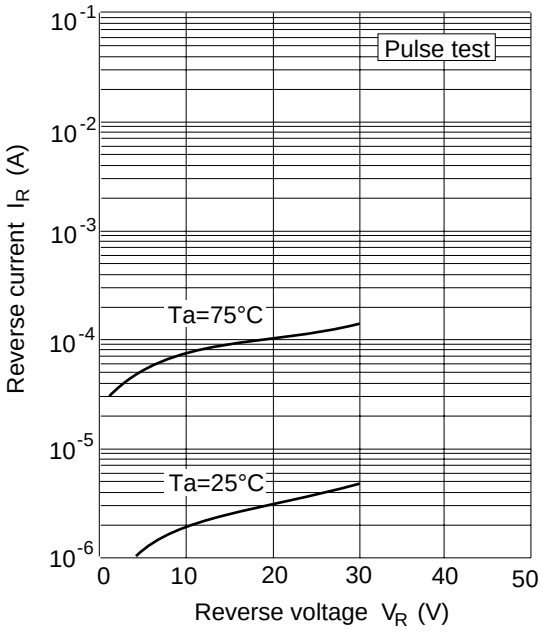


Fig.2 Reverse current Vs. Reverse voltage

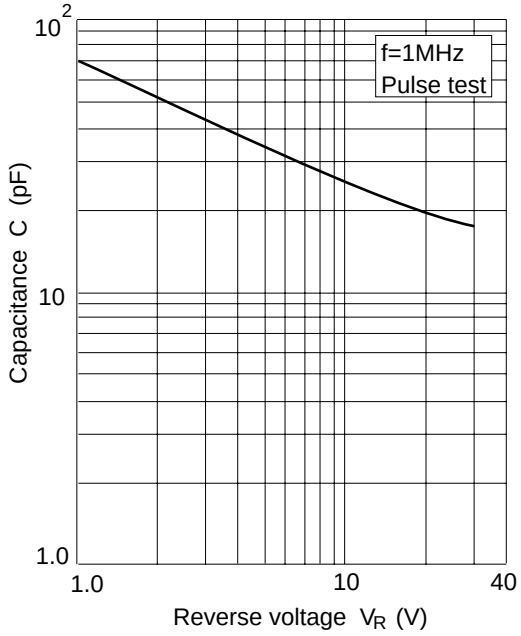
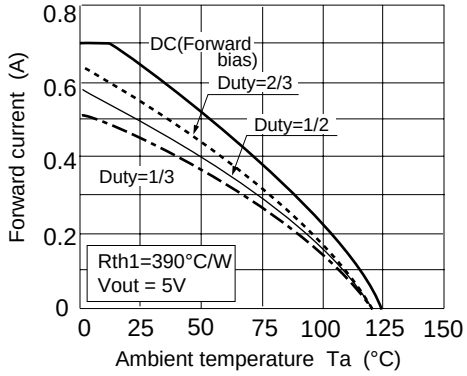
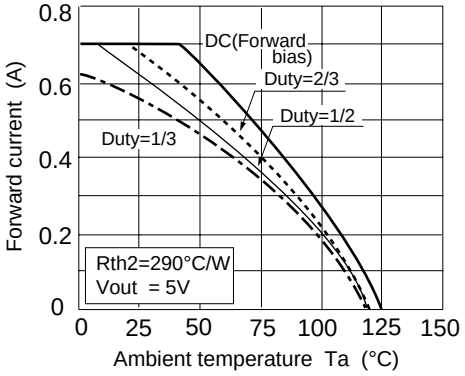
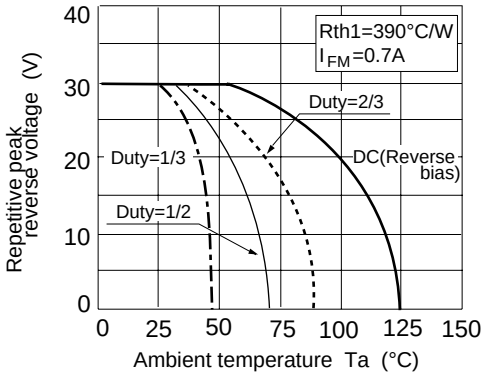


Fig.3 Capacitance Vs. Reverse voltage







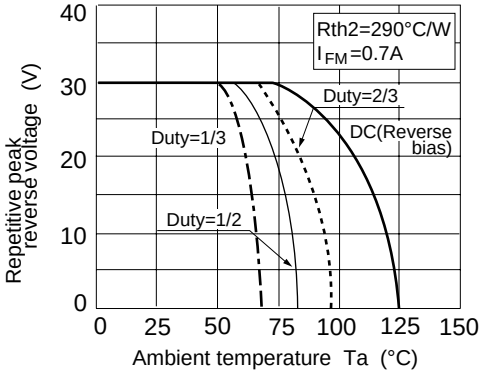
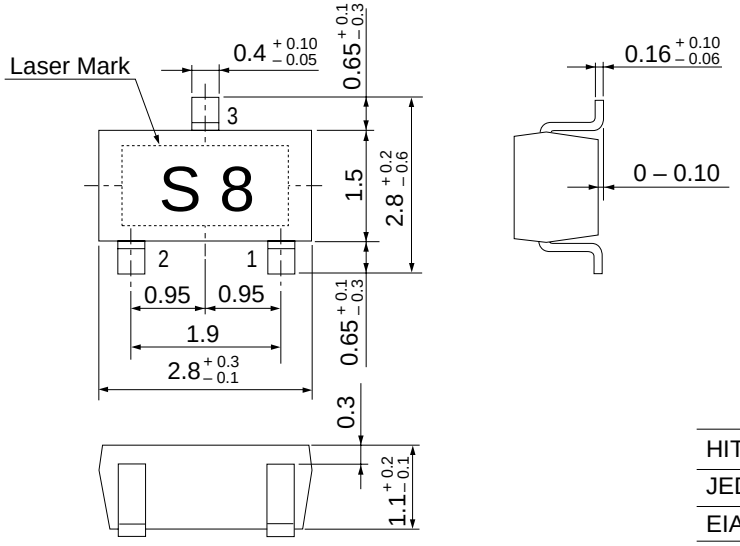


Fig.4 Forward current Vs. Ambient temperature (Polyimide substrate)

Fig.5 Repetitive peak reverse voltage Vs. Ambient temperature (Ceramic substrate)

Package Dimensions

Unit: mm



1 NC
2 Anode
3 Cathode

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