

HRB0103A

Silicon Schottky Barrier Diode
for Low Voltage High Speed Switching , Rectifying

HITACHI

ADE-208-490(Z)

Rev 0

Apr. 1997

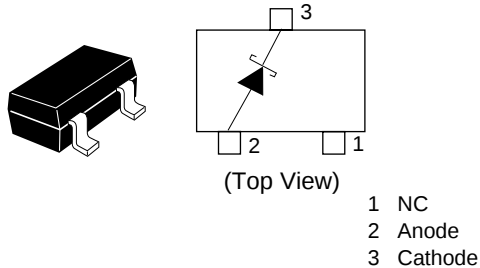
Features

- Low forward voltage drop and suitable for high efficiency forward current.
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HRB0103A	E1	CMPAK

Outline



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	30	V
Average rectified current	I_o^{*1}	100	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*2}	3	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +150	°C

Note: 1. See Fig.5
Note: 2. 10msec sine wave 1 pulse

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.44	V	$I_F = 100\text{ mA}$
Reverse current	I_R	—	—	50	μA	$V_R = 30\text{V}$

Main Characteristic

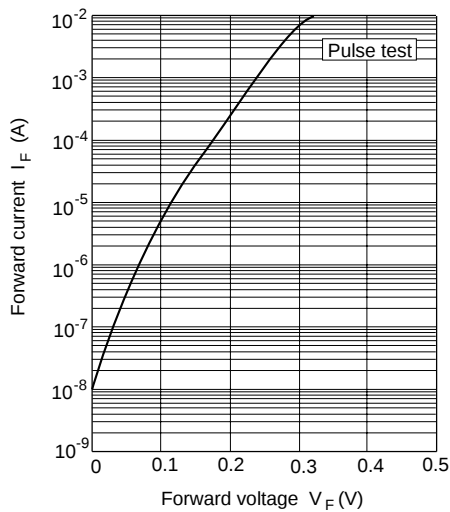


Fig.1 Forward current Vs. Forward voltage

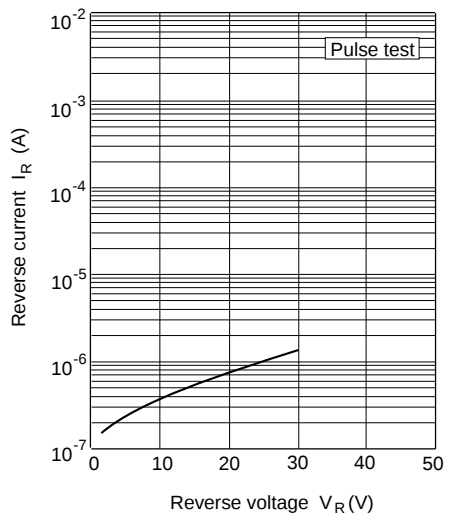


Fig.2 Reverse current Vs. Reverse voltage

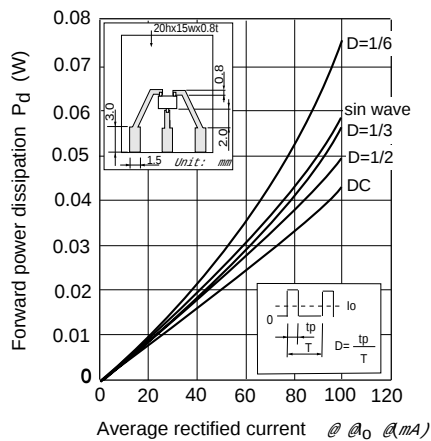


Fig3. Forward power dissipation Vs. Average rectified current

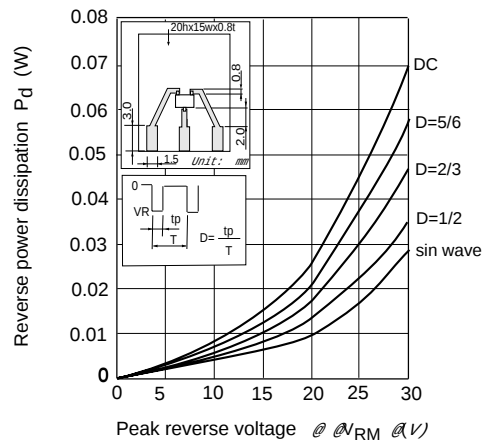


Fig4. Reverse power dissipation Vs. Peak reverse voltage

Main Characteristic

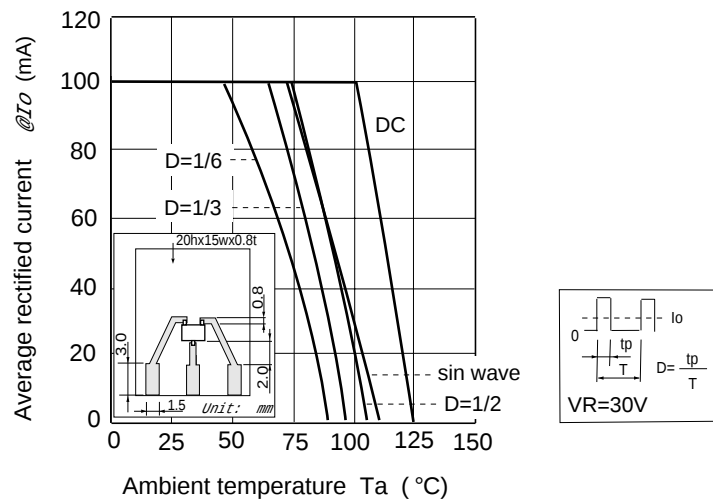
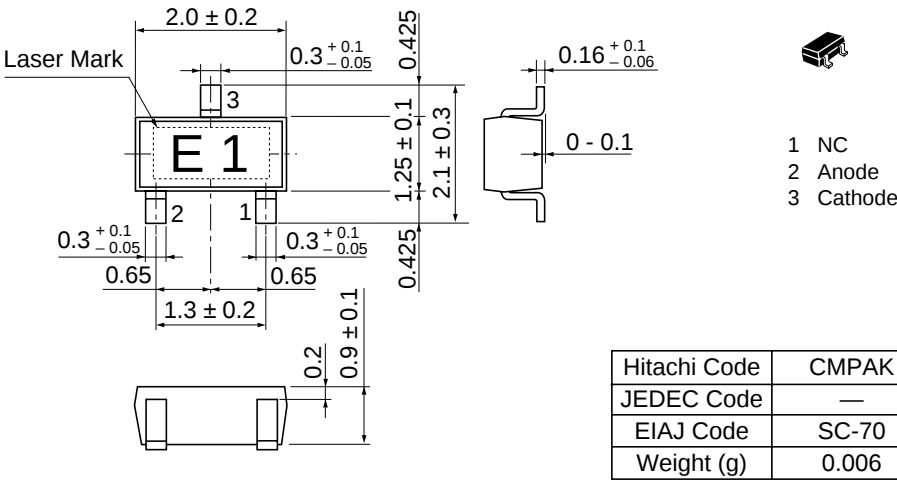


Fig.5 Average rectified current Vs. Ambient temperature

Package Dimensions

Unit : mm



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