To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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HRB0103B

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

ADE-208-491A (Z)

Rev.1
May. 2002

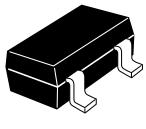
Features

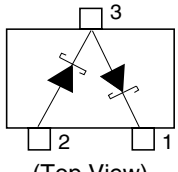
- Low forward voltage drop and suitable for high efficiency forward current.
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Code
HRB0103B	E2	CMPAK

Pin Arrangement





(Top View)

1. Cathode
2. Anode
3. Cathode
   Anode

Absolute Maximum Ratings *[1]

(Ta = 25°C)

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

Notes: 1. Per one device.
2. See Fig.5, Two device total.
3. 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 mA
Reverse current	I_R	—	—	50	µA	V_R = 30 V

Main Characteristics

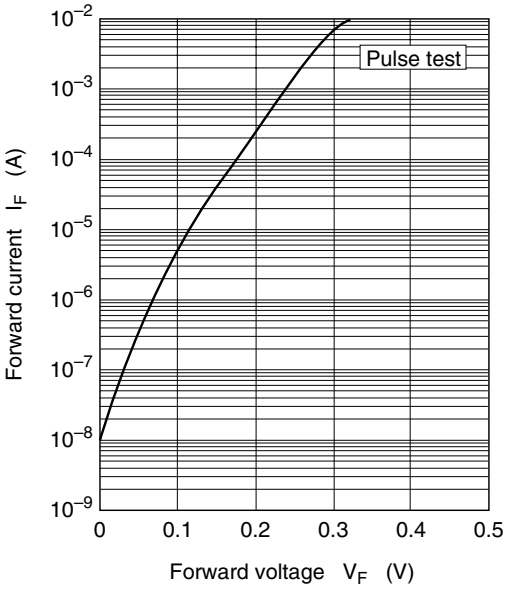


Fig.1 Forward current vs. Forward voltage

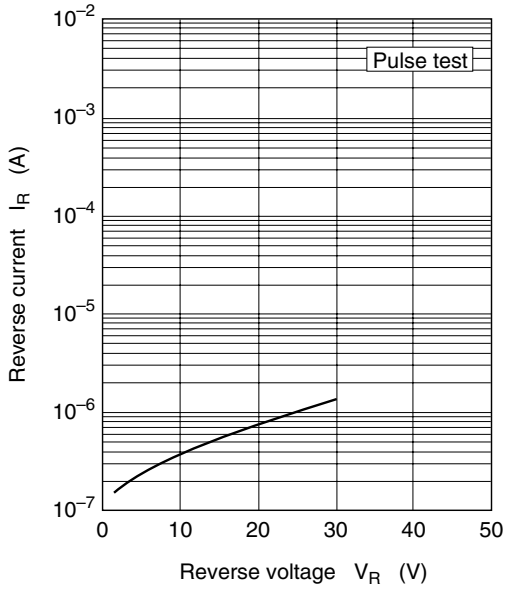


Fig.2 Reverse current vs. Reverse voltage

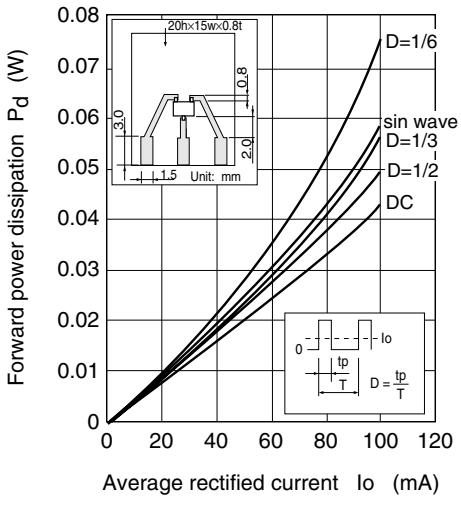


Fig3. Forward power dissipation vs. Average rectified current

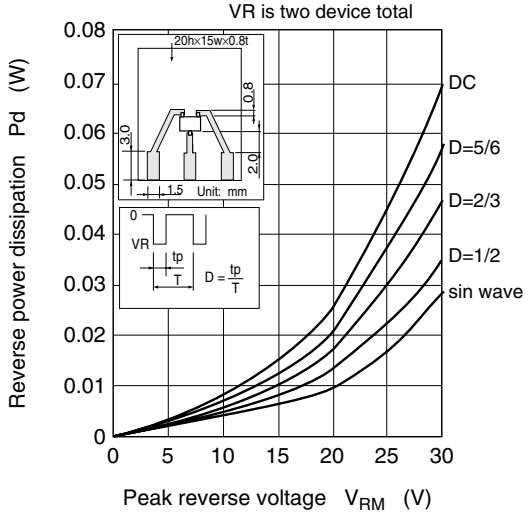


Fig4. Forward power dissipation vs. Peak reverse voltage

Main Characteristics (cont)

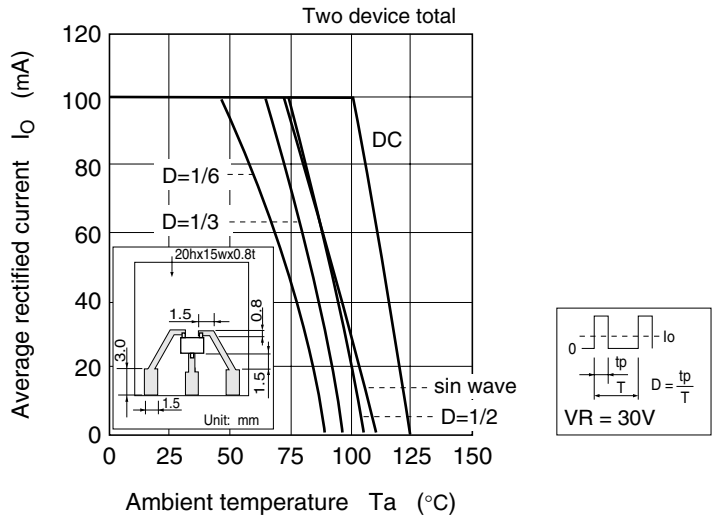
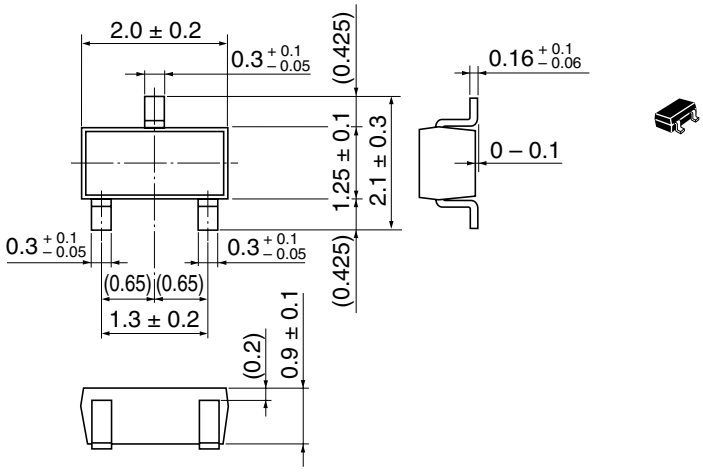


Fig.5 Average rectified current vs. Ambient temperature

Package Dimensions

As of January, 2002

Unit: mm



Hitachi Code	CMPAK
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.006 g

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