# HRB0103A

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

HITACHI

ADE-208-490(Z)
Rev 0

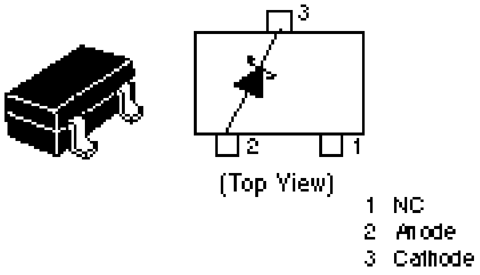
## Features

- Low forward voltage drop and suitable for high effifiency 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 |

Notes: 1. See Fig.5
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 mA |
| Reverse current | $I_R$ | — | — | 50 | µA | $V_R$ = 30V |

## Main Characteristic

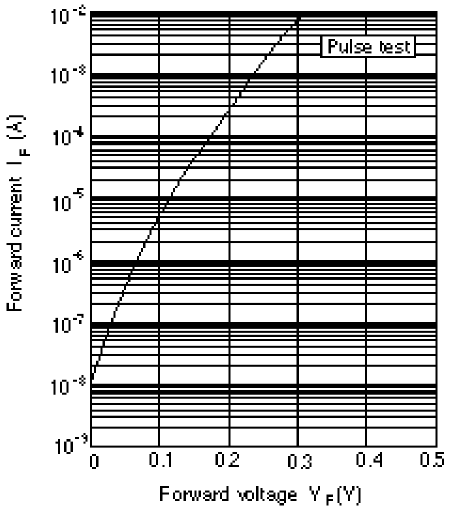


Fig.1 Forward current Vs. Forward voltage

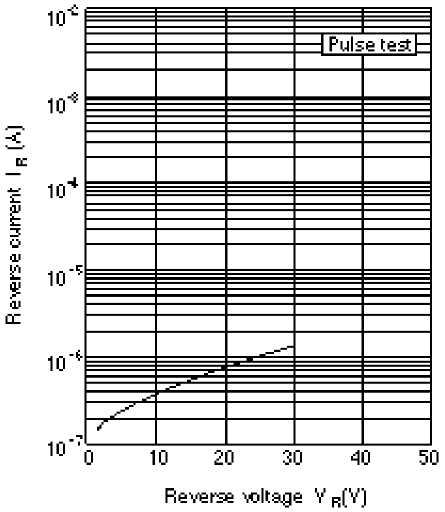


Fig.2 Reverse current Vs. Reverse voltage

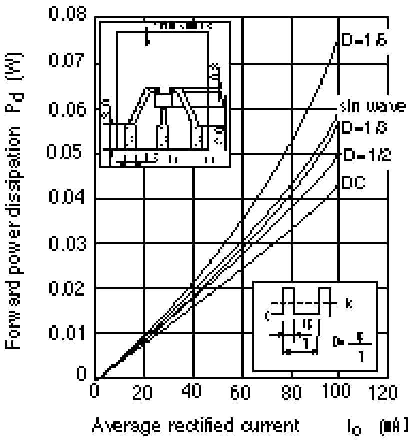


Fig3. Forward power dissipation Vs. Average rectified current

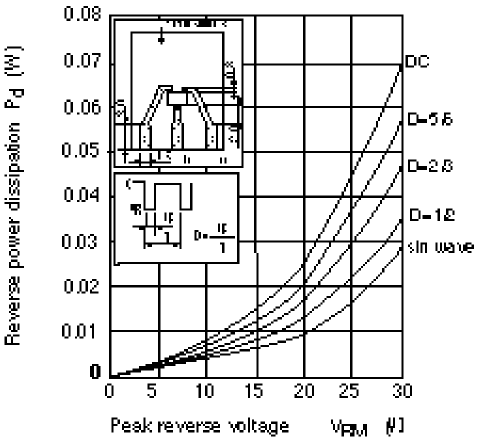


Fig4. Reverse power dissipation Vs. Peak reverse voltage

## Main Characteristic

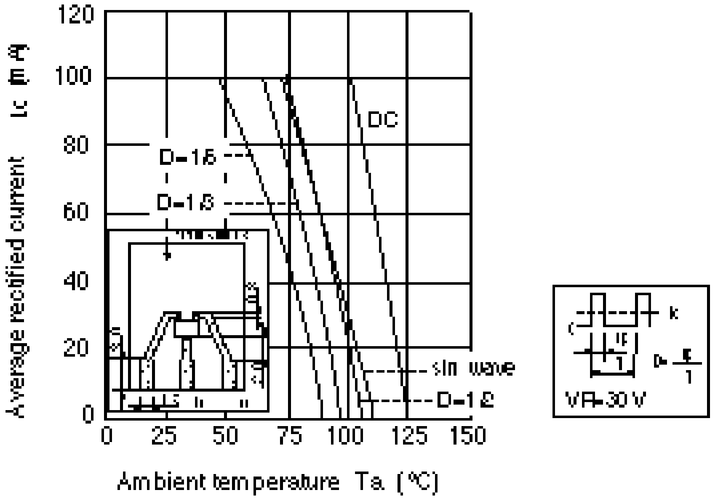
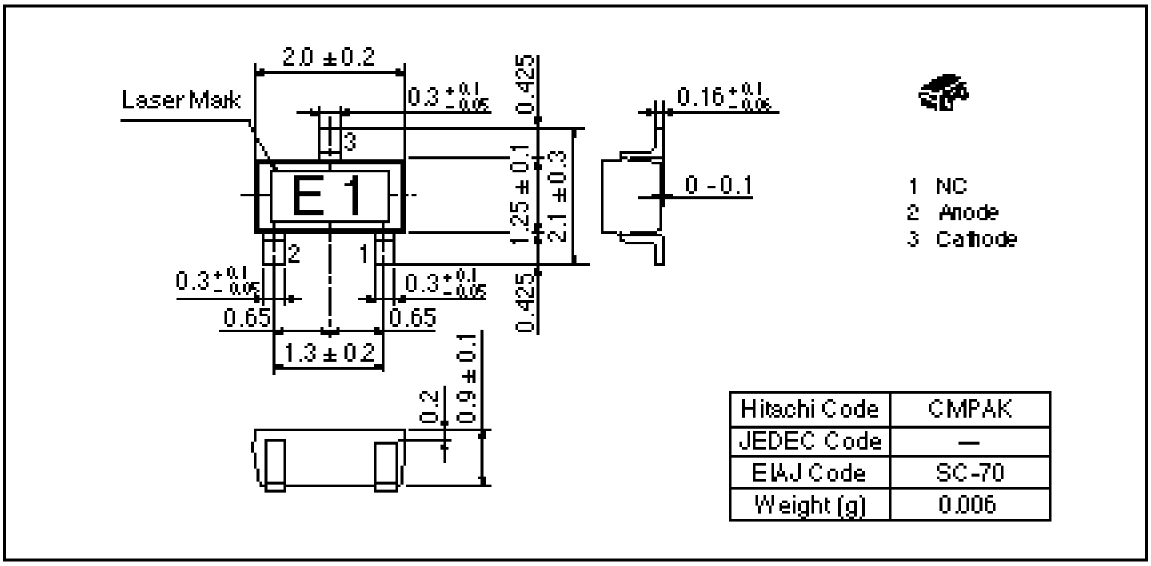


Fig.5 Average rectified current Vs. Ambient temperature

## Package Dimensions

**Unit : mm**



| | |
|---|---|
| Hitachi Code | CMPAK |
| JEDEC Code | — |
| EIAJ Code | SC-70 |
| Weight (g) | 0.006 |