

HRW0502A

Silicon Schottky Barrier Diode for Rectifying

REJ03G0157-0600Z
(Previous: ADE-208-108E)
Rev.6.00
Jan.06.2004

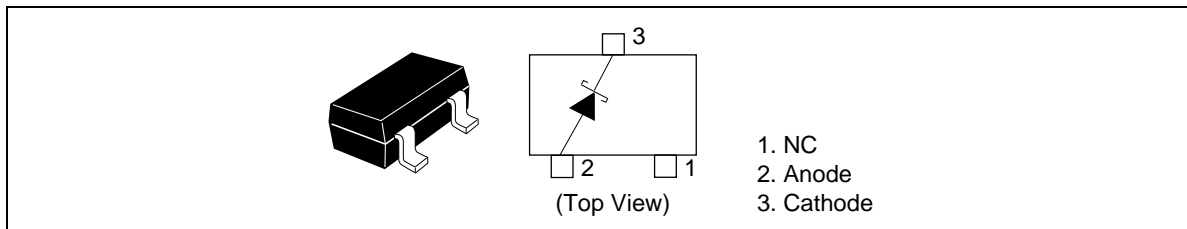
Features

- 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 |
|----------|------------|--------------|
| HRW0502A | S10 | MPAK |

Pin Arrangement



HRW0502A

Absolute Maximum Ratings

($T_a = 25^\circ\text{C}$)

| Item | Symbol | Value | Unit |
|---|----------------|-------------|------------------|
| Repetitive peak reverse voltage | V_{RRM}^{*1} | 20 | V |
| Average rectified current | I_O^{*1} | 500 | mA |
| Non-Repetitive peak forward surge current | I_{FSM}^{*2} | 5 | A |
| Junction temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +125 | $^\circ\text{C}$ |

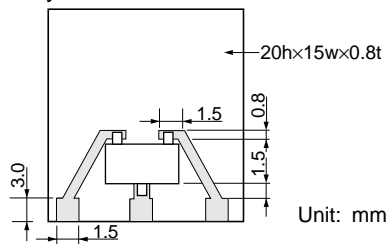
Notes: 1. See from Fig.4 to Fig.6
2. 10 ms sine wave 1 pulse

Electrical Characteristics

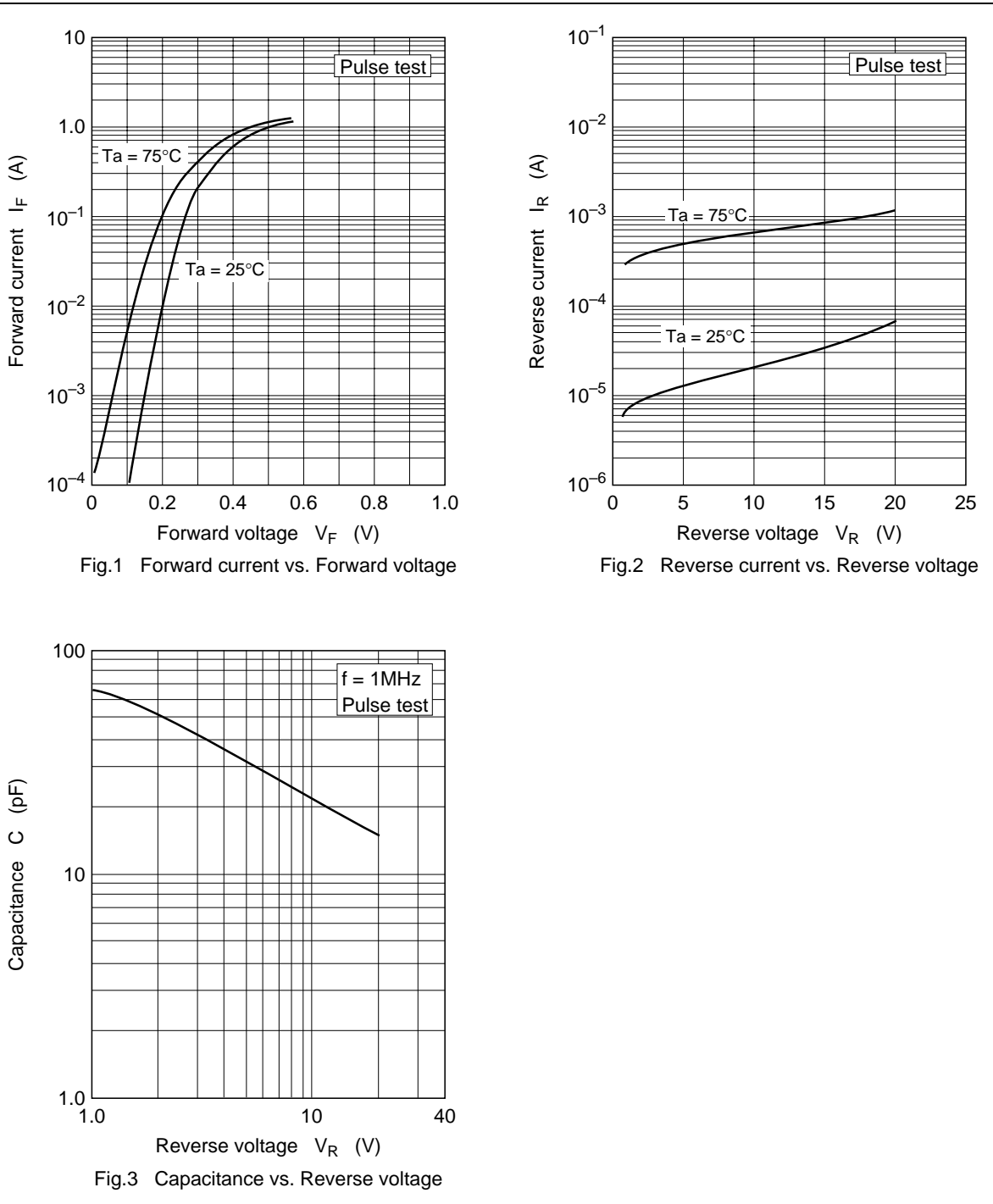
($T_a = 25^\circ\text{C}$)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|--------------------|---------------|-----|-----|-----|--------------------|---|
| Forward voltage | V_F | — | — | 0.4 | V | $I_F = 500\text{ mA}$ |
| Reverse current | I_R | — | — | 200 | μA | $V_R = 20\text{ V}$ |
| Capacitance | C | — | 120 | — | pF | $V_R = 0\text{ V}$, $f = 1\text{ MHz}$ |
| Thermal resistance | $R_{th(j-a)}$ | — | 340 | — | $^\circ\text{C/W}$ | Polyimide board *1 |

Note: Polyimide board



Main Characteristic



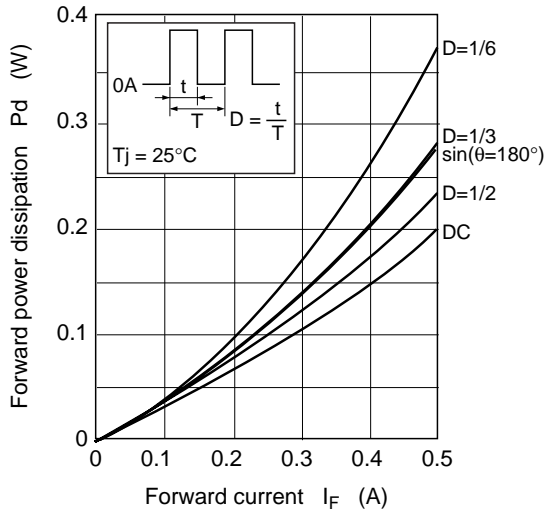


Fig.4 Forward power dissipation vs. Forward current

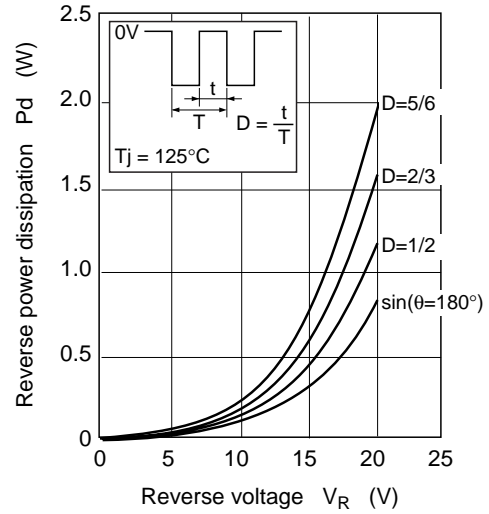


Fig.5 Reverse power dissipation vs. Reverse voltage

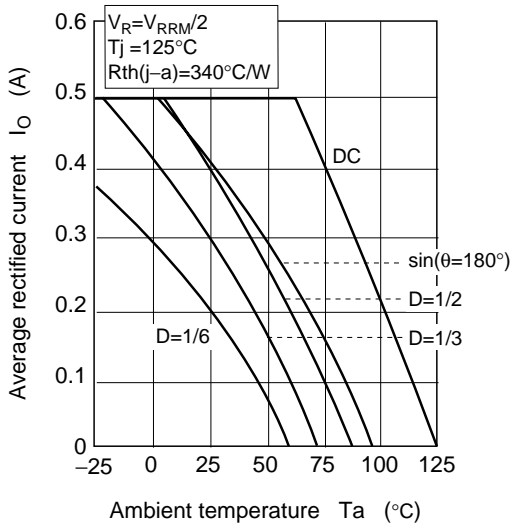
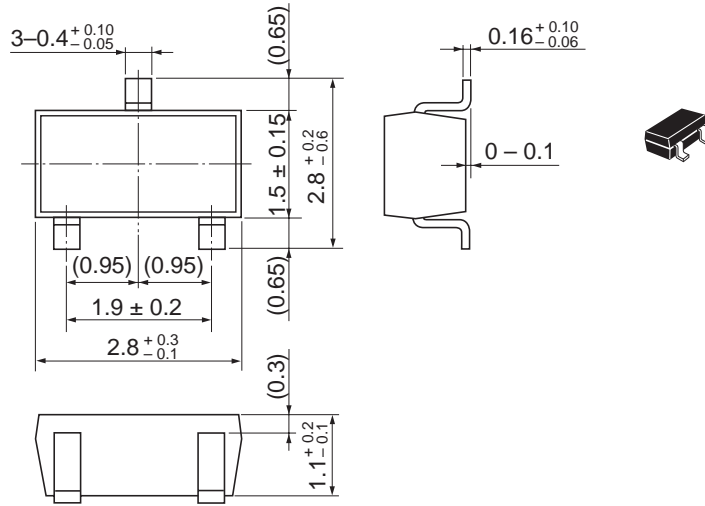


Fig.6 Average rectified current vs. Ambient temperature

Package Dimensions

As of January, 2003
Unit: mm



| | |
|------------------------|----------|
| Package Code | MPAK |
| JEDEC | — |
| JEITA | Conforms |
| Mass (reference value) | 0.011 g |

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Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, United Kingdom
Tel: <44> (1628) 585 100, Fax: <44> (1628) 585 900

Renesas Technology Europe GmbH
Dornacher Str. 3, D-85622 Feldkirchen, Germany
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7/F., North Tower, World Finance Centre, Harbour City, Canton Road, Hong Kong
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Renesas Technology (Shanghai) Co., Ltd.
26/F., Ruijin Building, No.205 Maoming Road (S), Shanghai 200020, China
Tel: <86> (21) 6472-1001, Fax: <86> (21) 6415-2952

Renesas Technology Singapore Pte. Ltd.
1, Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632
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