

HSB2838

Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G0549-0200
(Previous: ADE-208-486A)
Rev.2.00
Mar 04, 2005

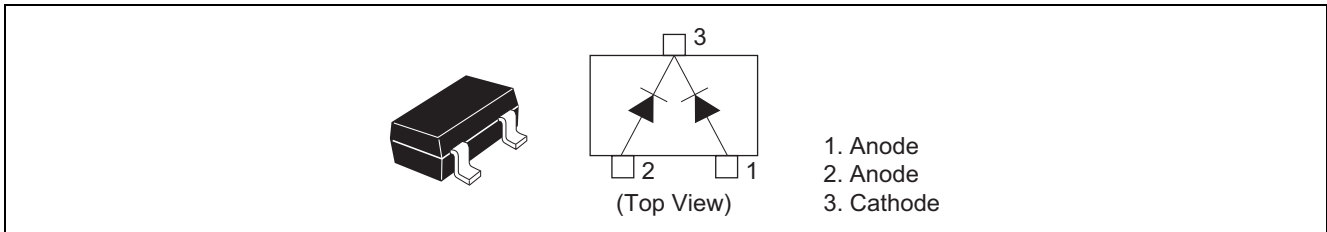
Features

- Fast recovery time.
- CMPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

| Type No. | Laser Mark | Package Name | Package Code (Previous Code) |
|----------|------------|--------------|---------------------------------|
| HSB2838 | A6 | CMPAK | PTSP0003ZB-A (CMPAK) |

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

| Item | Symbol | Value | Unit |
|---|----------------|-------------|------|
| Peak reverse voltage | V_{RM} | 85 | V |
| Reverse voltage | V_R | 80 | V |
| Peak forward current | I_{FM}^{*1} | 300 | mA |
| Non-Repetitive peak forward surge current | I_{FSM}^{*2} | 4 | A |
| Average rectified current | I_O^{*1} | 100 | mA |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55 to +125 | °C |

Notes: 1. Two device total.

2. Value at duration of 1 μ s, two device total.

Electrical Characteristics *

(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|-----------------------|----------|-----|-----|-----|---------|---|
| Forward voltage | V_{F1} | — | — | 1.0 | V | $I_F = 10$ mA |
| | V_{F2} | — | — | 1.0 | | $I_F = 50$ mA |
| | V_{F3} | — | — | 1.2 | | $I_F = 100$ mA |
| Reverse current | I_R | — | — | 0.1 | μ A | $V_R = 80$ V |
| Capacitance | C | — | — | 2.0 | pF | $V_R = 0$ V, $f = 1$ MHz |
| Reverse recovery time | t_{rr} | — | — | 3.0 | ns | $I_F = 10$ mA, $V_R = 6$ V, $R_L = 50 \Omega$ |

Note: Per one device.

Main Characteristic

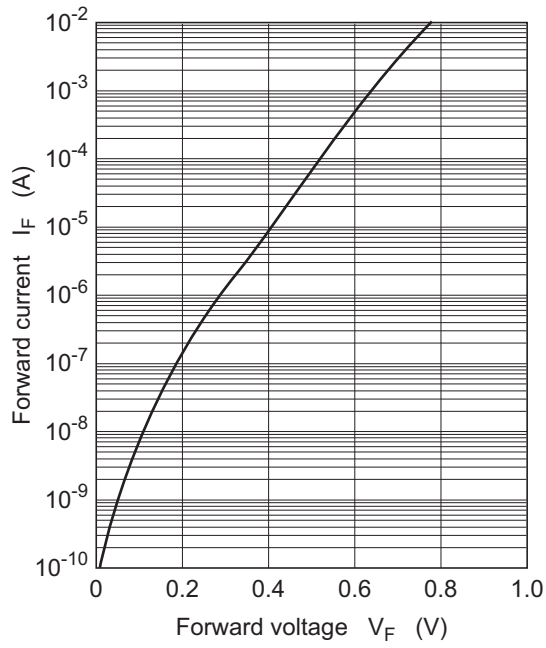


Fig.1 Forward current vs. Forward voltage

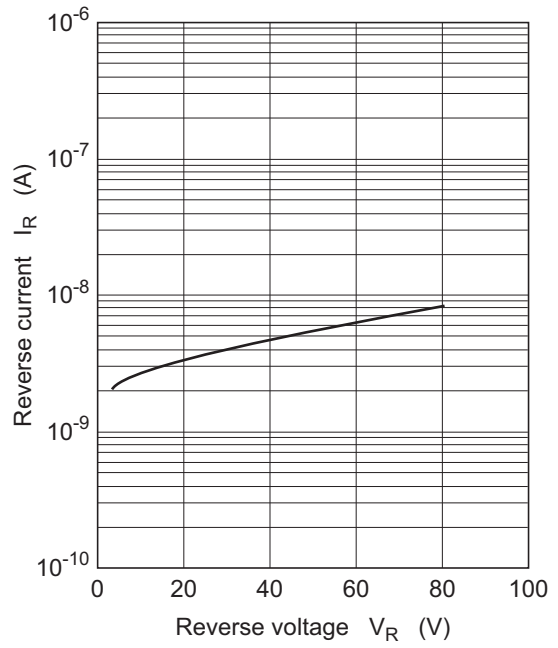


Fig.2 Reverse current vs. Reverse voltage

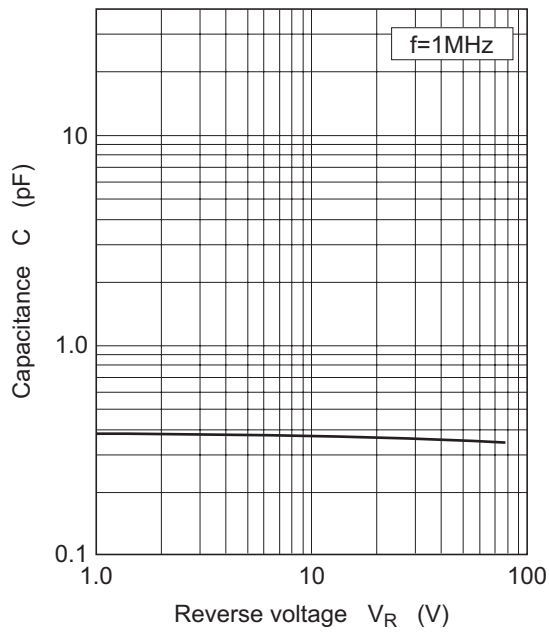
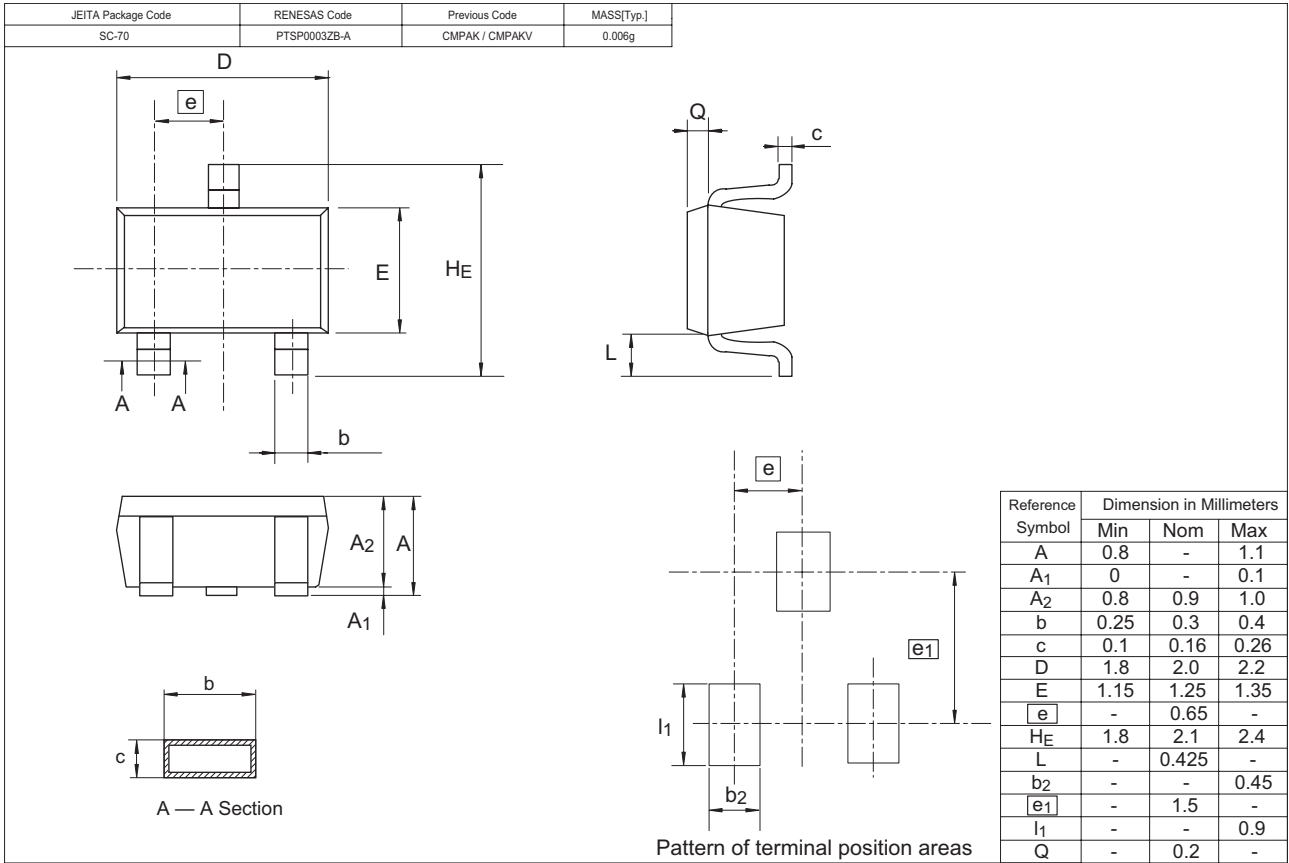


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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