

HSM2838C

Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G0555-0500
 Rev.5.00
 Dec 12, 2008

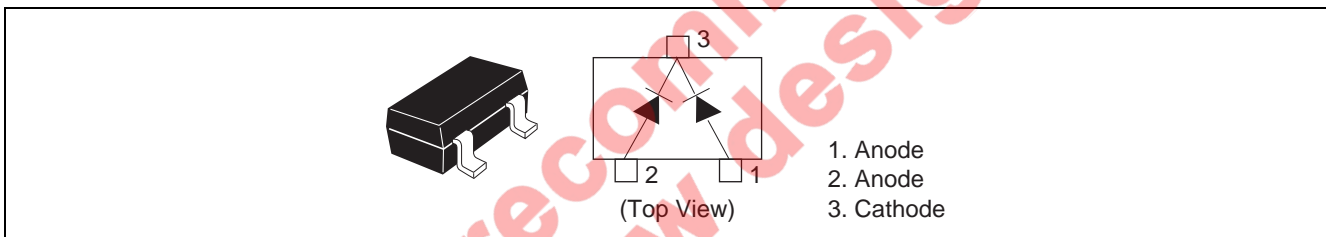
Features

- Fast recovery time. ($t_{rr} = 3.0\text{ns}$ max)
- MPAK package is suitable for high density surface mounting and high speed assembly.

Ordering Information

| Part No | Laser Mark | Package Name | Package Code | Taping Abbreviation (Quantity) |
|------------|------------|--------------|--------------|--------------------------------|
| HSM2838CTL | A6 | MPAK | PLSP0003ZC-A | TL (3,000 pcs / reel) |
| HSM2838CTR | A6 | MPAK | PLSP0003ZC-A | TR (3,000 pcs / reel) |

Pin Arrangement



Absolute Maximum Ratings *1

(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} | 300 | mA |
| Non-Repetitive peak forward surge current | I_{FSM}^{*2} | 4 | A |
| Average rectified current | I_o | 100 | mA |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55 to +150 | °C |

Notes: 1. Per one device.

2. Within 1 μ s forward surge current.**Electrical Characteristics** *1

(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|-----------------------|----------|-----|------|-----|---------|---|
| Forward voltage | V_F | — | 0.76 | 1.0 | V | $I_F = 10$ mA |
| | V_F | — | 0.88 | 1.0 | V | $I_F = 50$ mA |
| | V_F | — | 0.97 | 1.2 | V | $I_F = 100$ mA |
| Reverse current | I_R | — | — | 0.1 | μ A | $V_R = 80$ V |
| Capacitance | C | — | 0.5 | 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, $R_L = 50$ Ω |

Note: 1. Per one device.

Not recommended
for new designs

Main Characteristics

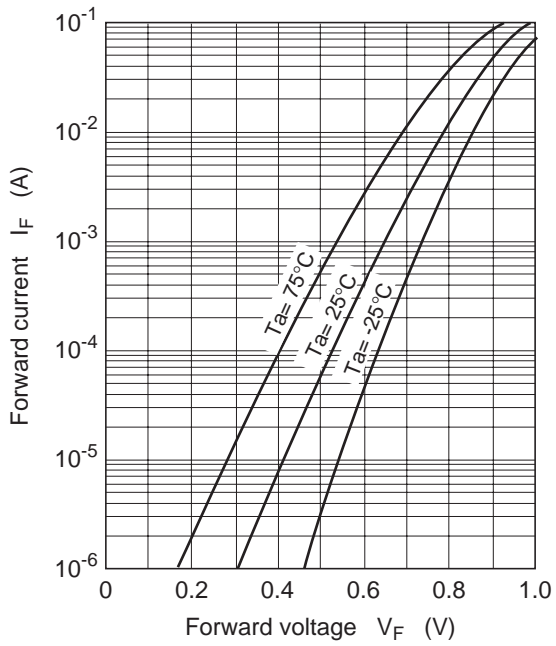


Fig.1 Forward current vs. Forward voltage

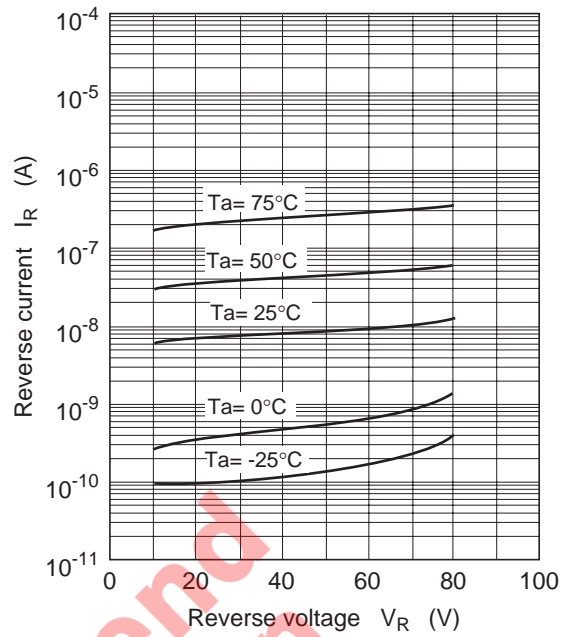


Fig.2 Reverse current vs. Reverse voltage

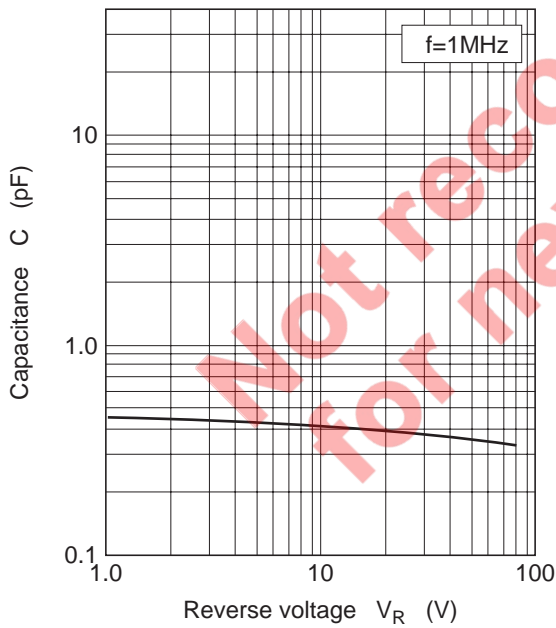
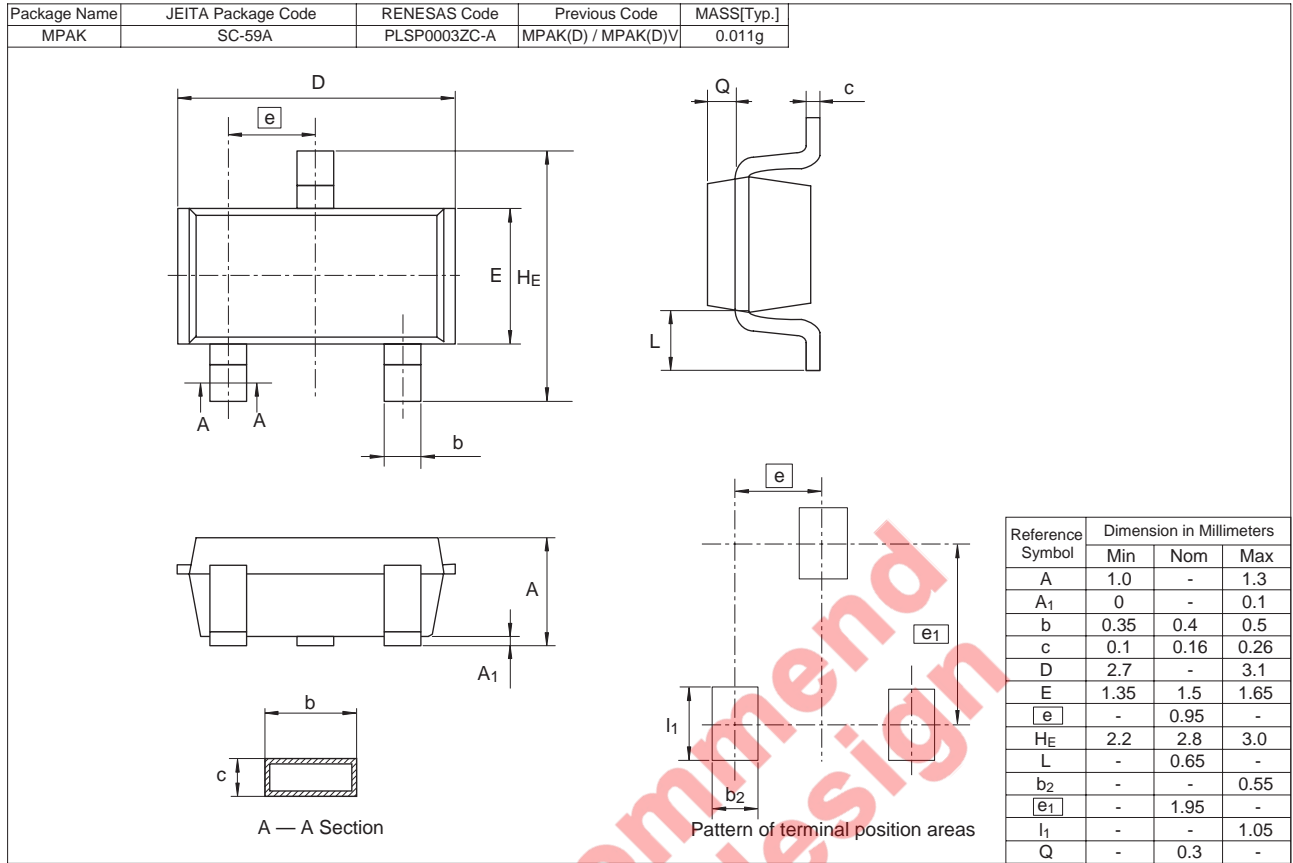


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



Not recommended for new design

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