

HSC88

Silicon Schottky Barrier Diode for Various Detector, Mixer

REJ03G0624-0100
(Previous: ADE-208-826)
Rev.1.00
Apr 12, 2005

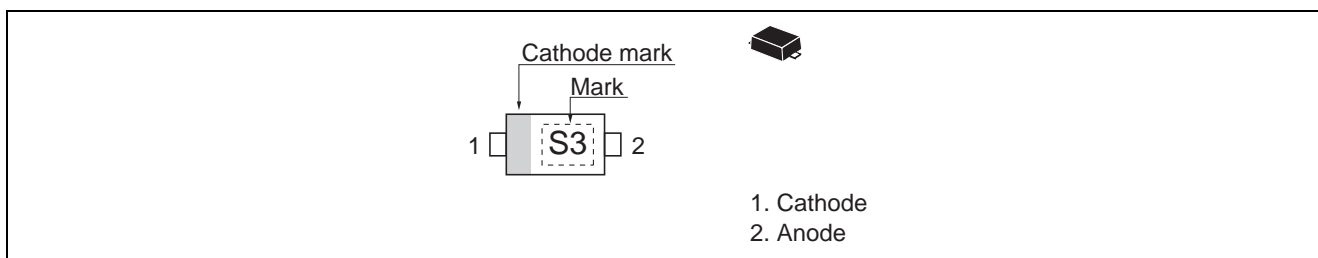
Features

- Low capacitance. (C = 0.8 pF max)
- Low forward voltage.
- Ultra small Flat Lead Package (UFP) is suitable for surface mount design.

Ordering Information

| Type No. | Cathode Mark | Package Name | Package Code (Previous Code) |
|----------|--------------|--------------|---------------------------------|
| HSC88 | S3 | UFP | PWSF0002ZA-A (UFP) |

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

| Item | Symbol | Value | Unit |
|---------------------------|-----------|-------------|------|
| Reverse voltage | V_R | 10 | V |
| Average rectified current | I_O | 15 | mA |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55 to +125 | °C |

Electrical Characteristics

(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|-------------------|----------|-------|-----|-------|---------------|---|
| Forward voltage | V_{F1} | 0.350 | — | 0.420 | V | $I_F = 1 \text{ mA}$ |
| | V_{F2} | 0.500 | — | 0.580 | | $I_F = 10 \text{ mA}$ |
| Reverse current | I_{R1} | — | — | 0.2 | μA | $V_R = 2 \text{ V}$ |
| | I_{R2} | — | — | 10 | | $V_R = 10 \text{ V}$ |
| Capacitance | C | — | — | 0.80 | pF | $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$ |
| ESD-Capability *1 | — | 30 | — | — | Ω | C = 200 pF, Both forward and reverse direction 1 pulse. |

Note: 1. Failure criterion ; $I_R \geq 0.4 \mu\text{A}$ at $V_R = 2 \text{ V}$

Main Characteristic

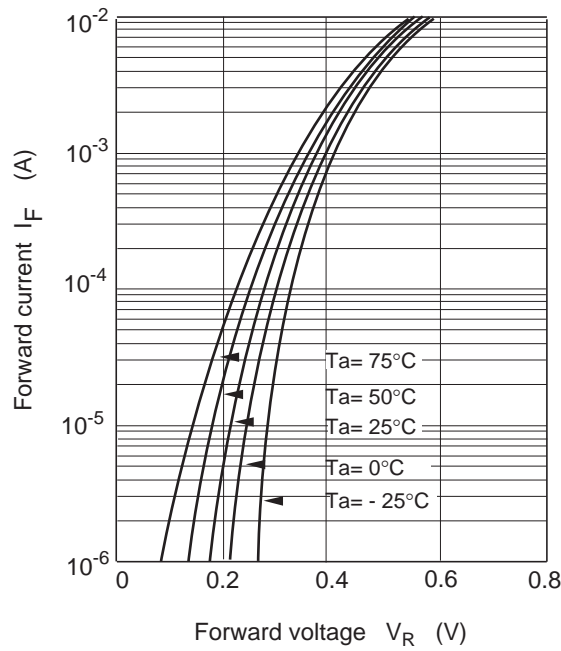


Fig.1 Forward current vs. Forward voltage

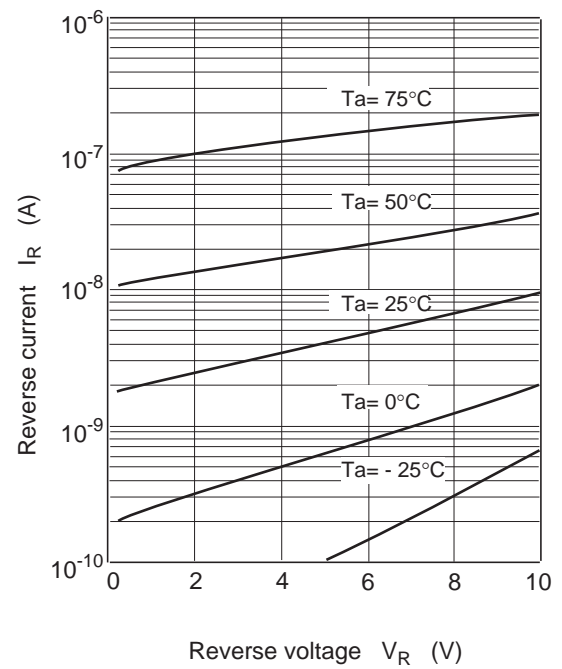


Fig.2 Reverse current vs. Reverse voltage

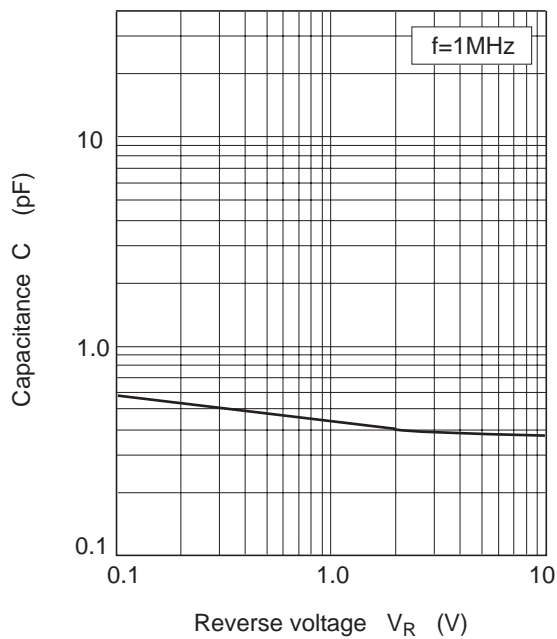
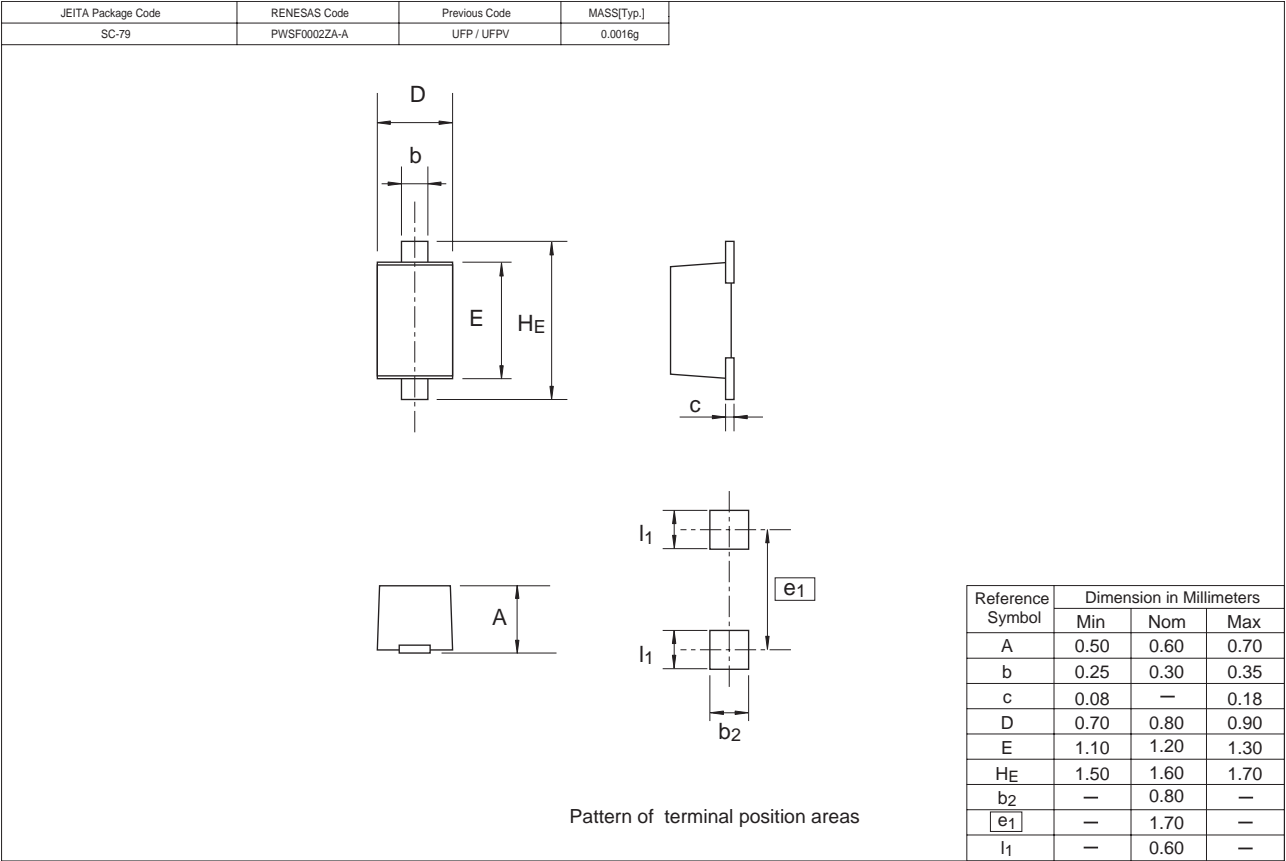


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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