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HSC119

Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G0188-0100Z (Previous: ADE-208-615) Rev.1.00 Mar.22.2004

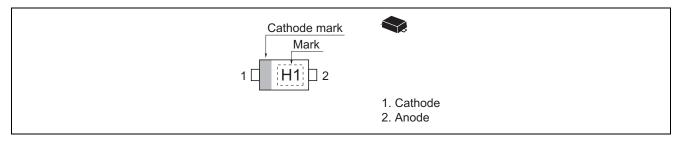
Features

- Low capacitance. (C = 2.0 pF max)
- Short reverse recovery time. ($t_{rr} = 3.0$ ns max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

| Туре No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HSC119 | H1 | UFP |

Pin Arrangement





Absolute Maximum Ratings

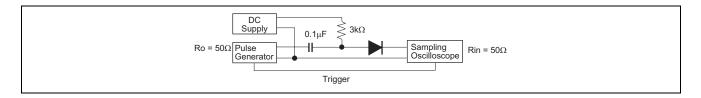
| | | | $(Ta = 25^{\circ}C)$ |
|-------------------------------------------|---------------------------------|-------------|----------------------|
| Item | Symbol | Value | Unit |
| Peak reverse voltage | V _{RM} | 85 | V |
| Reverse voltage | V _R | 80 | V |
| Peak forward current | I _{FM} | 300 | mA |
| Non-Repetitive peak forward surge current | I _{FSM} * ¹ | 4 | А |
| Average rectified current | lo | 100 | mA |
| Junction temperature | Тј | 125 | °C |
| Storage temperature | Tstg | -55 to +125 | °C |

Note: 1. Within $1\mu s$ forward surge current.

Electrical Characteristics

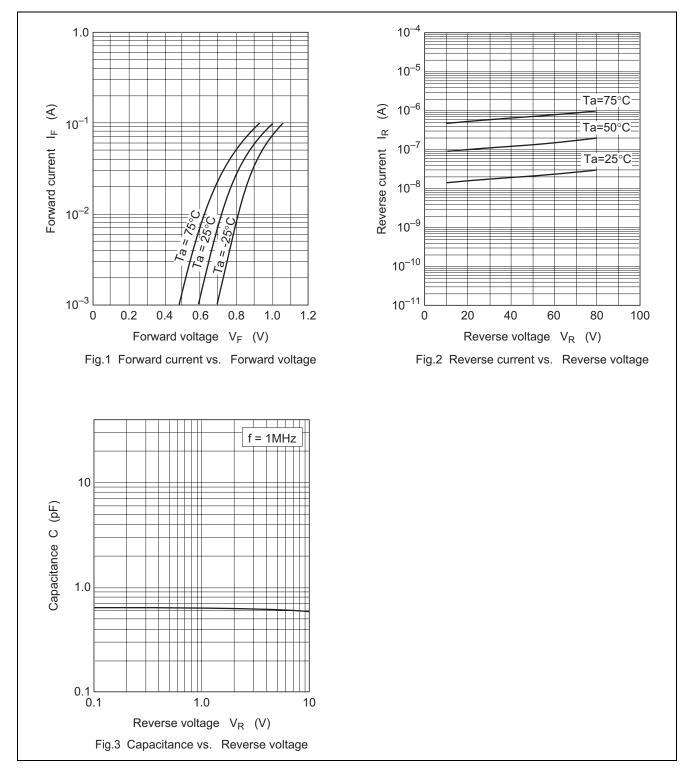
| | | | | | | $(Ta = 25^{\circ}C)$ |
|-------------------------|-----------------|-----|-----|-----|------|---------------------------------------------------------------------|
| Item | Symbol | Min | Тур | Max | Unit | Test Condition |
| Forward voltage | V_{F1} | _ | _ | 0.8 | V | I _F = 10 mA |
| | V _{F2} | _ | _ | 1.2 | | I _F = 100 mA |
| Reverse current | I _R | _ | _ | 0.1 | μA | V _R = 80 V |
| Capacitance | С | _ | _ | 2.0 | pF | $V_{R} = 0 V, f = 1 MHz$ |
| Reverse recovery time*1 | t _{rr} | _ | _ | 3.0 | ns | $I_F = 10 \text{ mA}, V_R = 6 \text{V}, \text{R}_L = 50 \Omega$ |

Note: 1. Reverse recovery time test circuit



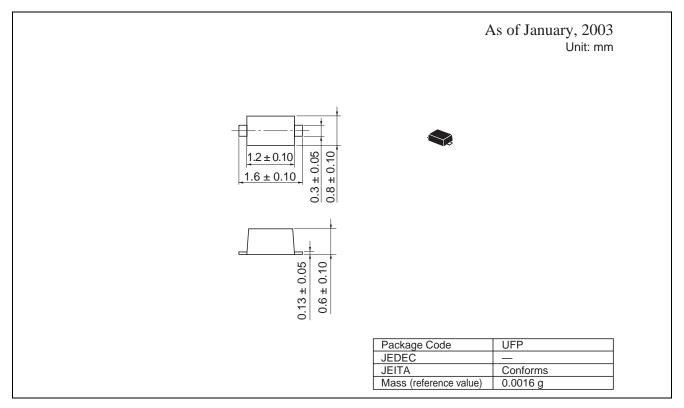


Main Characteristics



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Package Dimensions





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