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Vishay General Semiconductor

| ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted) | | | | | | | | | |
|---|------------------------|-------------------------|-------------------------------|------|------|------|--|--|--|
| PARAMETER | TEST CONDITIONS | | SYMBOL | TYP. | MAX. | UNIT | | | |
| Maximum instantaneous forward voltage | I _F = 2.0 A | T _J = 25 °C | V _F ⁽¹⁾ | 0.77 | 0.80 | V | | | |
| | | T _J = 125 °C | | 0.62 | 0.66 | | | | |
| Maximum reverse current at rated V _R | | T _J = 25 °C | I _R ⁽²⁾ | 0.1 | 1.0 | μΑ | | | |
| | | T _J = 125 °C | | 60 | 500 | | | | |
| Typical junction capacitance | 4.0 V, 1 MHz | | CJ | 65 | - | pF | | | |

Notes

(1) Pulse test: 300 µs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

| THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted) | | | | | | | |
|---|---------------------------------|-----------|---------|------|--|--|--|
| PARAMETER | SYMBOL | SS2PH9 | SS2PH10 | UNIT | | | |
| | R _{θJA} ⁽¹⁾ | 110 15 | | °C/W | | | |
| Typical thermal resistance | R _{0JL} (1) | | | | | | |
| | R ₀ JC (1) | 25 | | | | | |

Note

(1) Thermal resistance from junction to ambient and junction to lead mounted on PCB with 15 mm x 15 mm copper pad areas. R_{6JC} is measured at the top center of the body

| ORDERING INFORMATION (Example) | | | | | | | |
|--------------------------------|-----------------|------------------------|---------------|------------------------------------|--|--|--|
| PREFERRED P/N | UNIT WEIGHT (g) | PREFERRED PACKAGE CODE | BASE QUANTITY | DELIVERY MODE | | | |
| SS2PH9-M3/84A | 0.024 | 84A | 3000 | 7" diameter plastic tape and reel | | | |
| SS2PH9-M3/85A | 0.024 | 85A | 10 000 | 13" diameter plastic tape and reel | | | |
| SS2PH9HM3_A/H (1) | 0.024 | Н | 3000 | 7" diameter plastic tape and reel | | | |
| SS2PH9HM3_A/I (1) | 0.024 | I | 10 000 | 13" diameter plastic tape and reel | | | |

Note

(1) AEC-Q101 qualified

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RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

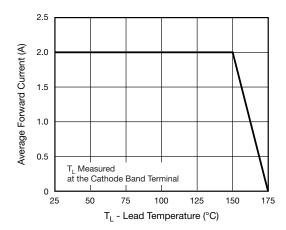


Fig. 1 - Forward Current Derating Curve

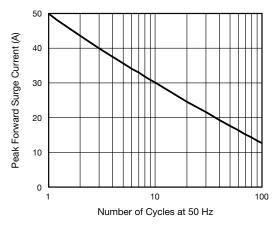


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

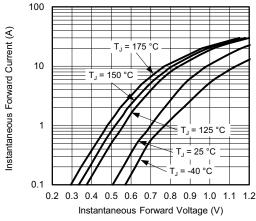


Fig. 3 - Typical Instantaneous Forward Characteristics

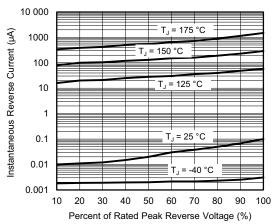


Fig. 4 - Typical Reverse Leakage Characteristics

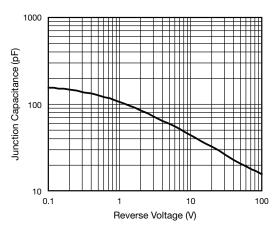


Fig. 5 - Typical Junction Capacitance

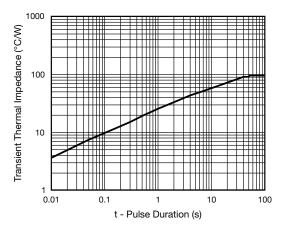


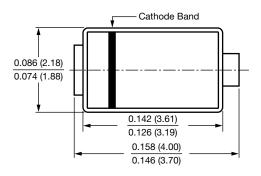
Fig. 6 - Typical Transient Thermal Impedance

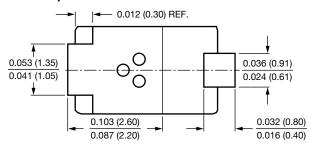


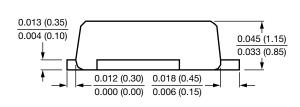
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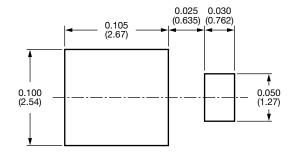
PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

SMP (DO-220AA)











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