

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 = 1.0 A | T _A = 25 °C T _A = 125 °C | V _F ⁽¹⁾ | 0.52 | 0.59 | V | | | |
| | | T _A = 125 °C | | 0.43 | 0.52 | | | | |
| Maximum reverse current | Rated V _R | T _A = 25 °C | I _R ⁽²⁾ | - | 100 | μA | | | |
| | | T _A = 125 °C | | 1.6 | 10 | mA | | | |
| Typical junction capacitance | 4.0 V, 1 MHz | | CJ | 80 | - | pF | | | |

Notes

 $^{(1)}\,$ Pulse test: 300 μs pulse width, 1 % duty cycle

 $^{(2)}$ Pulse test: Pulse width $\leq 40\mbox{ ms}$

| THERMAL CHARACTERISTICS ($T_A = 25$ °c unless otherwise noted) | | | | | | | | |
|--|---------------------------------|--------|--------|------|--|--|--|--|
| PARAMETER | SYMBOL | SS1P5L | SS1P6L | UNIT | | | | |
| Typical thermal resistance | R _{θJA} ⁽¹⁾ | 125 | | °C/W | | | | |
| rypical thermal resistance | R _{θJL} ⁽¹⁾ | 25 | | | | | | |

Note

⁽¹⁾ Thermal resistance from junction to ambient and junction to lead mounted on PCB with 5.0 mm x 5.0 mm copper pad areas. $R_{\theta JL}$ - is measured at the terminal of cathode band.

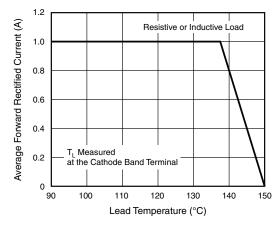
| ORDERING INFORMATION (Example) | | | | | | | |
|--------------------------------|-----------------|------------------------|---------------|------------------------------------|--|--|--|
| PREFERRED P/N | UNIT WEIGHT (g) | PREFERRED PACKAGE CODE | BASE QUANTITY | DELIVERY MODE | | | |
| SS1P6L-M3/84A | 0.024 | 84A | 3000 | 7" diameter plastic tape and reel | | | |
| SS1P6L-M3/85A | 0.024 | 85A | 10 000 | 13" diameter plastic tape and reel | | | |
| SS1P6LHM3/84A (1) | 0.024 | 84A | 3000 | 7" diameter plastic tape and reel | | | |
| SS1P6LHM3/85A (1) | 0.024 | 85A | 10 000 | 13" diameter plastic tape and reel | | | |

Note

⁽¹⁾ Automotive grade



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



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Fig. 1 - Maximum Forward Current Derating Curve

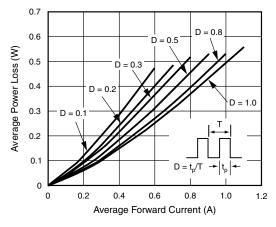


Fig. 2 - Forward Power Loss Characteristics

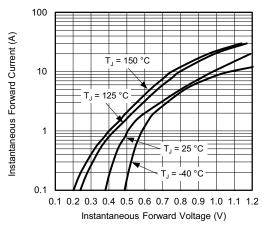


Fig. 3 - Typical Instantaneous Forward Characteristics

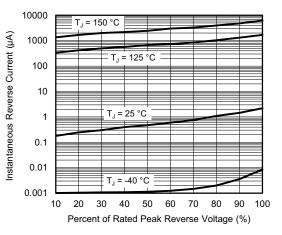


Fig. 4 - Typical Reverse Leakage Characteristics

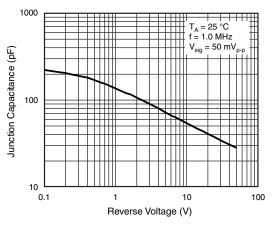


Fig. 5 - Typical Junction to Capacitance

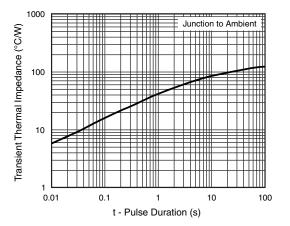


Fig. 6 - Typical Transient Thermal Impedance

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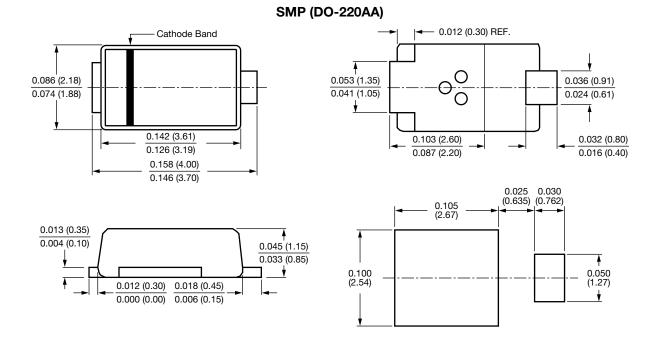
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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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