



**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

| PARAMETER                               | TEST CONDITIONS       |                           | SYMBOL               | TYP. | MAX. | UNIT          |  |
|---|-----------------------|---------------------------|----------------------|------|------|---------------|--|
| Instantaneous forward voltage per diode | $I_F = 2.5 \text{ A}$ | $T_A = 25^\circ\text{C}$  | $V_F$ <sup>(1)</sup> | 0.40 | -    | V             |  |
|   | $I_F = 5.0 \text{ A}$ |                           |                      | 0.45 | 0.53 |               |  |
|   | $I_F = 2.5 \text{ A}$ | $T_A = 125^\circ\text{C}$ |                      | 0.29 | -    |               |  |
|   | $I_F = 5.0 \text{ A}$ |                           |                      | 0.37 | 0.44 |               |  |
| Reverse current per diode               | Rated $V_R$           | $T_A = 25^\circ\text{C}$  | $I_R$ <sup>(2)</sup> | 56   | 550  | $\mu\text{A}$ |  |
|   |                       | $T_A = 125^\circ\text{C}$ |                      | 28   | 45   | mA            |  |
| Typical junction capacitance per diode  | 4.0 V, 1 MHz          |                           | $C_J$                | 430  | -    | pF            |  |

**Notes**

(1) Pulse test: 300  $\mu\text{s}$  pulse width, 1 % duty cycle

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

 **THERMAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise specified)

| PARAMETER                            | SYMBOL                         | SS10P3C | SS10P4C | UNIT |
|--------------------------------------|--------------------------------|---------|---------|------|
| Typical thermal resistance per diode | $R_{\theta JA}$ <sup>(1)</sup> | 60      |         | °C/W |
|                                      | $R_{\theta JL}$                | 3       |         |      |

**Note**

(1) Units mounted on recommended PCB 1 oz. pad layout

**ORDERING INFORMATION** (Example)

| PREFERRED P/N                 | UNIT WEIGHT (g) | PACKAGE CODE | BASE QUANTITY | DELIVERY MODE                      |
|-------------------------------|-----------------|--------------|---------------|------------------------------------|
| SS10P4C-M3/86A                | 0.10            | 86A          | 1500          | 7" diameter plastic tape and reel  |
| SS10P4C-M3/87A                | 0.10            | 87A          | 6500          | 13" diameter plastic tape and reel |
| SS10P4CHM3_A/H <sup>(1)</sup> | 0.10            | H            | 1500          | 7" diameter plastic tape and reel  |
| SS10P4CHM3_A/I <sup>(1)</sup> | 0.10            | I            | 6500          | 13" diameter plastic tape and reel |

**Note**

(1) AEC-Q101 qualified

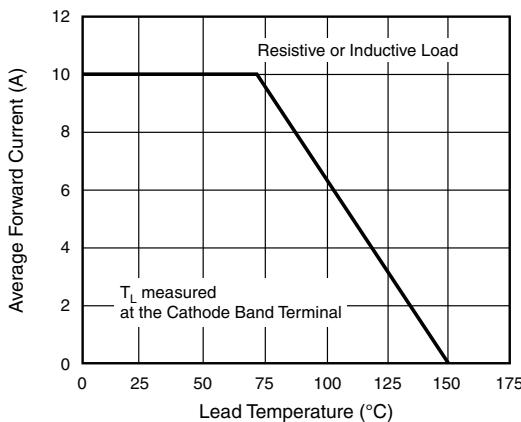
**RATINGS AND CHARACTERISTICS CURVES** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)


Fig. 1 - Maximum Forward Current Derating Curve

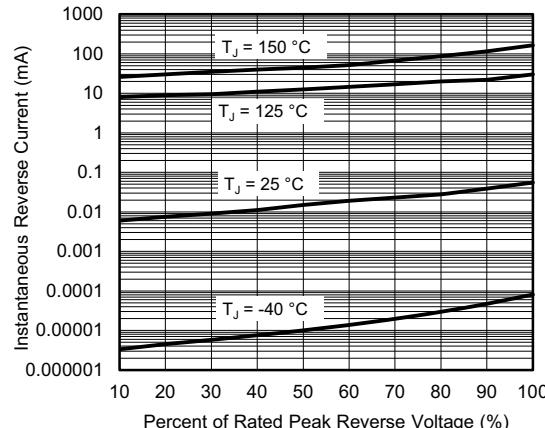


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode

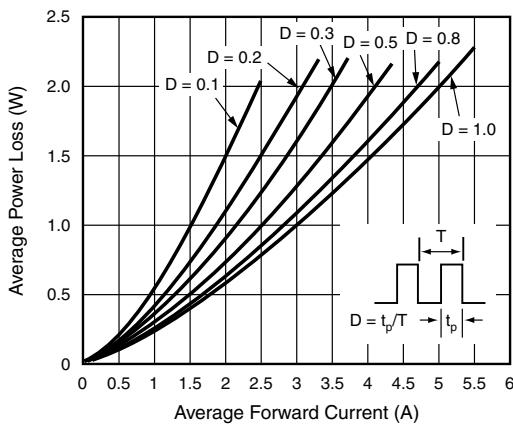


Fig. 2 - Forward Power Loss Characteristics Per Diode

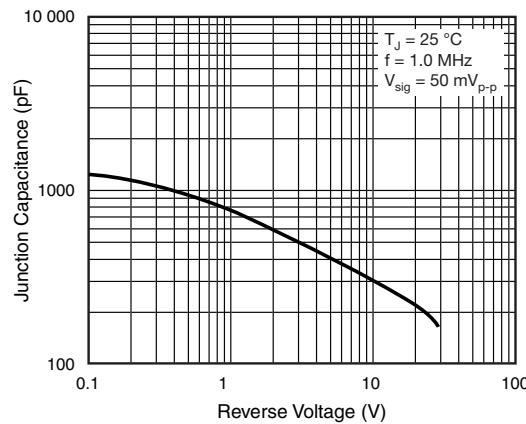


Fig. 5 - Typical Junction Capacitance Per Diode

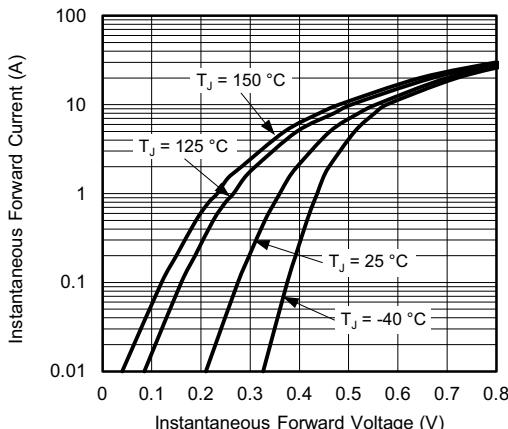


Fig. 3 - Typical Instantaneous Forward Characteristics Per Diode

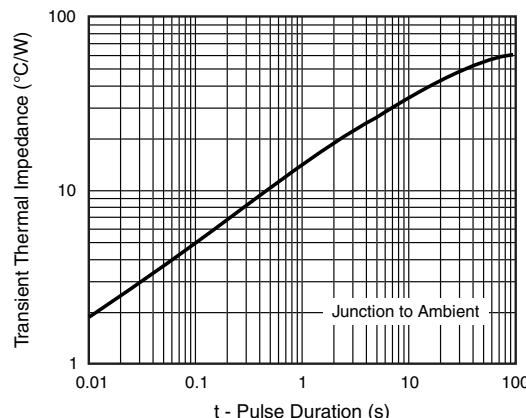
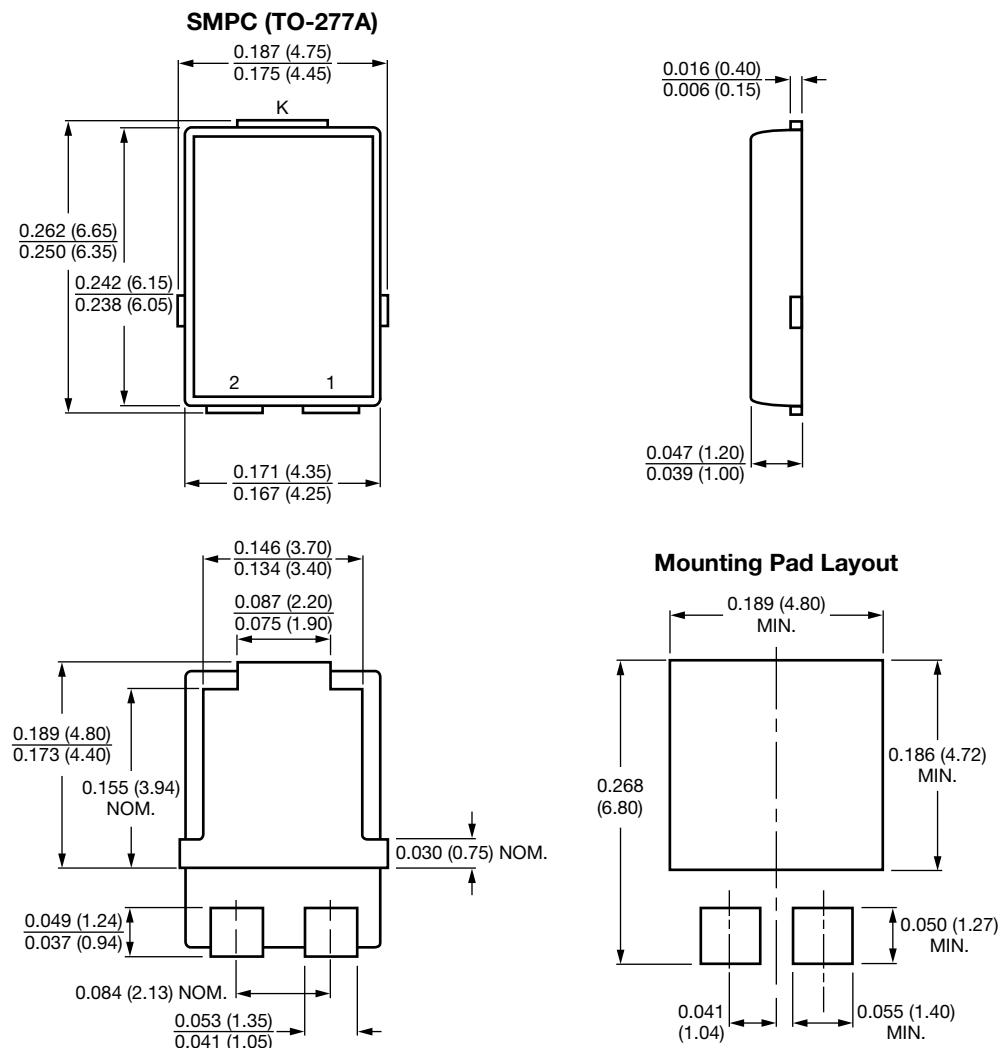


Fig. 6 - Typical Transient Thermal Impedance Per Diode

**PACKAGE OUTLINE DIMENSIONS** in inches (millimeters)


Conform to JEDEC® TO-277A

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