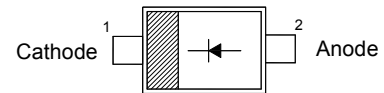


## Surface Mount Schottky Barrier Diode

MARKING:SK



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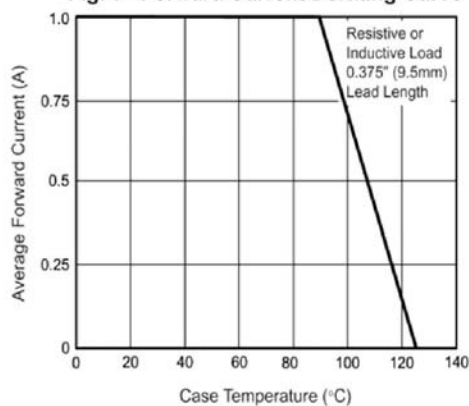
**Absolute Maximum Ratings ( $T_a = 25\text{ }^{\circ}\text{C}$ )**

| Parameter                                                         | Symbol      | Value         | Unit               |
|-------------------------------------------------------------------|-------------|---------------|--------------------|
| Reverse Voltage                                                   | $V_R$       | 30            | V                  |
| Average Forward Rectified Current                                 | $I_{F(AV)}$ | 1             | A                  |
| Non-Repetitive Peak Forward Surge Current ( $t = 8.3\text{ ms}$ ) | $I_{FSM}$   | 9             | A                  |
| Power Dissipation                                                 | $P_{tot}$   | 450           | mW                 |
| Operating Temperature Range                                       | $T_j$       | - 55 to + 125 | $^{\circ}\text{C}$ |
| Storage Temperature Range                                         | $T_{stg}$   | - 55 to + 125 | $^{\circ}\text{C}$ |

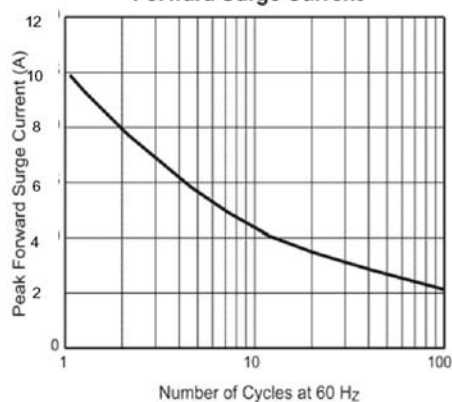
**Characteristics at  $T_a = 25\text{ }^{\circ}\text{C}$** 

| Parameter                                                       | Symbol      | Min. | Max.   | Unit |
|-----------------------------------------------------------------|-------------|------|--------|------|
| Reverse Breakdown Voltage<br>at $I_R = 1\text{ mA}$             | $V_{(BR)R}$ | 30   | -      | V    |
| Forward Voltage<br>at $I_F = 1\text{ A}$                        | $V_F$       | -    | 0.55   | V    |
| at $I_F = 3\text{ A}$                                           |             | -    | 0.0875 |      |
| Reverse Voltage Leakage Current<br>at $V_R = 30\text{ V}$       | $I_R$       | -    | 1      | mA   |
| Total Capacitance<br>at $V_R = 4\text{ V}$ , $f = 1\text{ MHz}$ | $C_{tot}$   | -    | 120    | pF   |

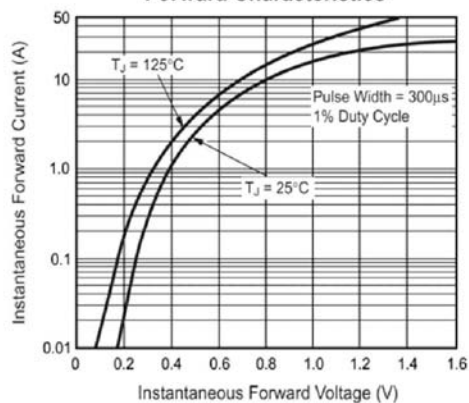
**Fig. 1 - Forward Current Derating Curve**



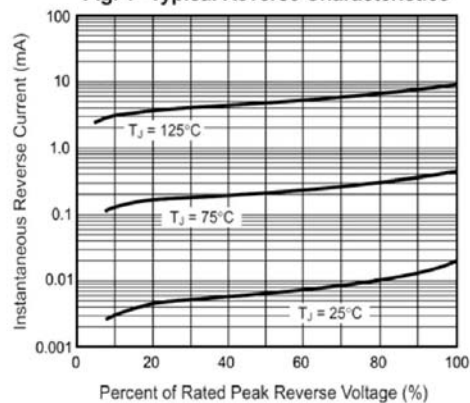
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**



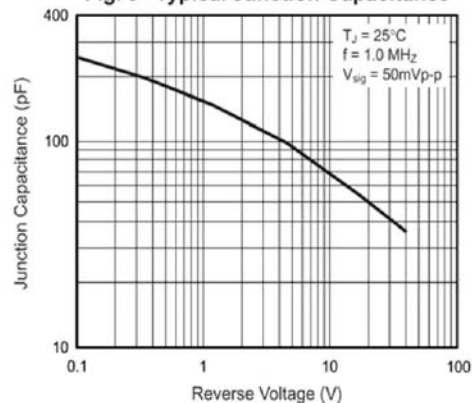
**Fig. 3 - Typical Instantaneous Forward Characteristics**



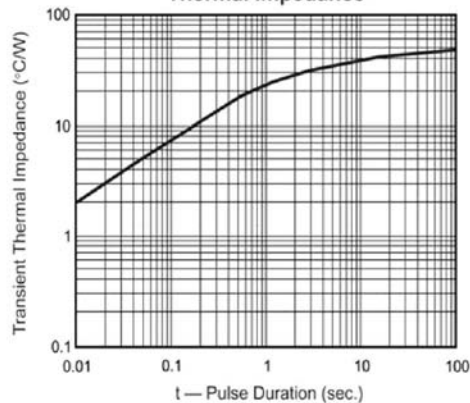
**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Junction Capacitance**



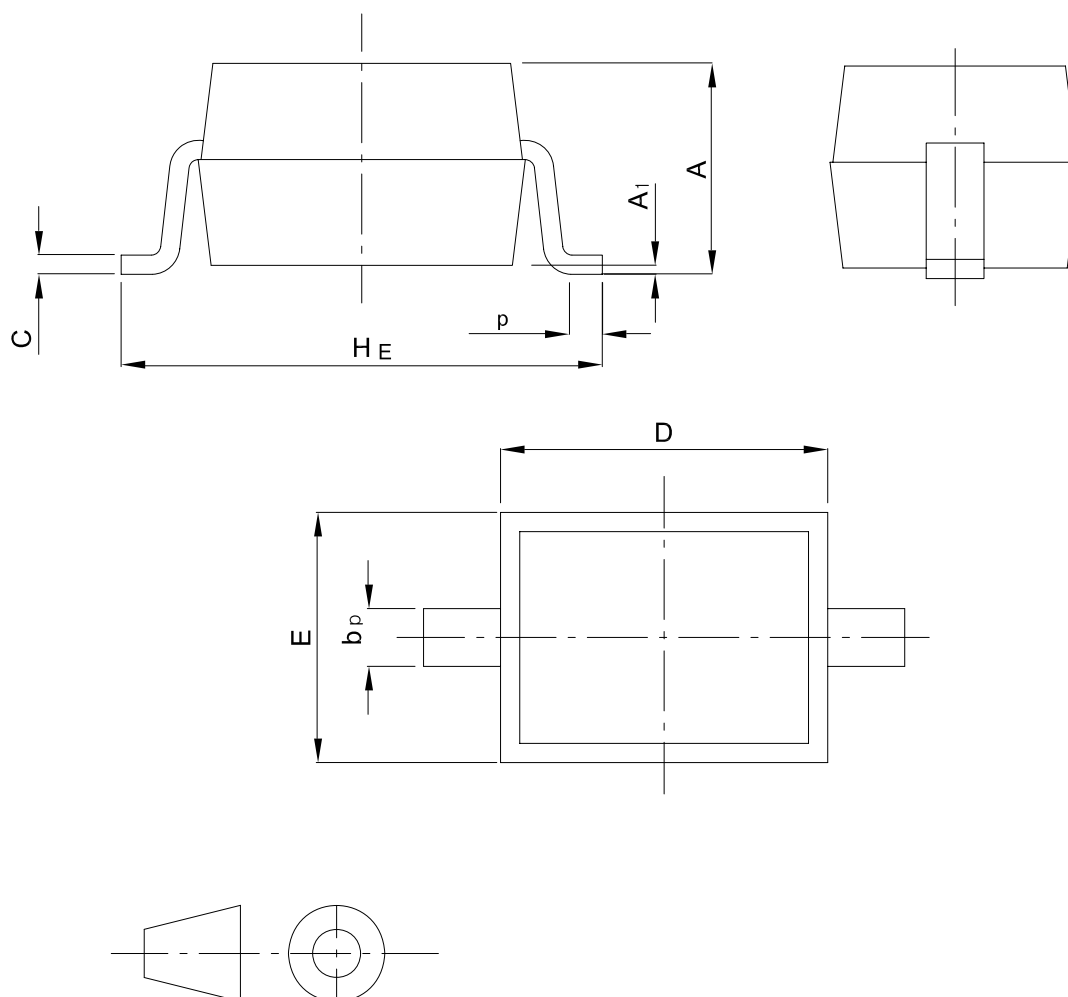
**Fig. 6 - Typical Transient Thermal Impedance**



### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

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| UNIT | A    | b <sub>p</sub> | C    | D    | E    | H <sub>E</sub> | A <sub>1</sub> | L <sub>p</sub> |
|------|------|----------------|------|------|------|----------------|----------------|----------------|
| mm   | 1.20 | 0.40           | 0.15 | 1.80 | 1.35 | 2.80           | 0.10           | 0.50           |
|      | 0.90 | 0.25           | 0.10 | 1.60 | 1.15 | 2.30           | 0.01           | 0.20           |