

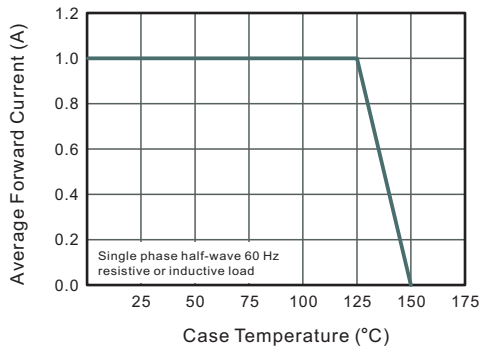
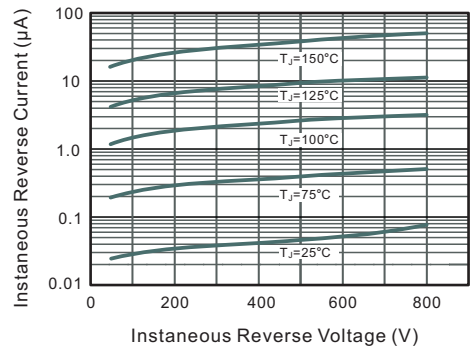


| Surface Mount General Purpose Silicon Rectifiers  |                 | Reverse Voltage - 50 to 1000 V<br>Forward Current - 1 A   |             |     |         |     |       |  |                    |  |  |  |  |  |  |
|---|-----------------|---|-------------|-----|---------|-----|-------|--|--------------------|--|--|--|--|--|--|
| <p align="center"><b>SMA</b></p> <table border="0"> <tr> <td>PIN</td> <td>DESCRIPTION</td> </tr> <tr> <td>1</td> <td>Cathode</td> </tr> <tr> <td>2</td> <td>Anode</td> </tr> </table> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>1</p> </div> <div style="text-align: center;">  <p>2</p> </div> </div> <p>Top View<br/>Marking Code: M1~M7<br/>Simplified outline SMA and symbol</p> |                 | PIN   | DESCRIPTION | 1   | Cathode | 2   | Anode | <p><b>Features</b></p> <ul style="list-style-type: none"> <li>• For surface mounted applications</li> <li>• Low profile package</li> <li>• Glass Passivated Chip Junction</li> <li>• Easy to pick and place</li> <li>• Lead free in comply with EU RoHS 2011/65/EU directives</li> </ul> <p><b>Mechanical Data</b></p> <ul style="list-style-type: none"> <li>• Case: SMA</li> <li>• Terminals: Solderable per MIL-STD-750, Method 2026</li> <li>• Approx. Weight: 0.055g / 0.002oz</li> </ul> |                    |  |  |  |  |  |  |
| PIN   | DESCRIPTION     |   |             |     |         |     |       |  |                    |  |  |  |  |  |  |
| 1   | Cathode         |   |             |     |         |     |       |  |                    |  |  |  |  |  |  |
| 2   | Anode           |   |             |     |         |     |       |  |                    |  |  |  |  |  |  |
| <p><b>Maximum Ratings and Electrical characteristics</b></p> <p>Ratings at 25 °C ambient temperature unless otherwise specified.<br/>Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.</p>   |                 |   |             |     |         |     |       |  |                    |  |  |  |  |  |  |
| Parameter   | Symbols         | M1  | M2          | M3  | M4      | M5  | M6    | M7   | Units              |  |  |  |  |  |  |
| Maximum Repetitive Peak Reverse Voltage   | $V_{RRM}$       | 50  | 100         | 200 | 400     | 600 | 800   | 1000   | V                  |  |  |  |  |  |  |
| Maximum RMS voltage   | $V_{RMS}$       | 35  | 70          | 140 | 280     | 420 | 560   | 700  | V                  |  |  |  |  |  |  |
| Maximum DC Blocking Voltage   | $V_{DC}$        | 50  | 100         | 200 | 400     | 600 | 800   | 1000   | V                  |  |  |  |  |  |  |
| Maximum Average Forward Rectified Current   | $I_{F(AV)}$     | 1   |             |     |         |     |       |  | A                  |  |  |  |  |  |  |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load  | $I_{FSM}$       | 30  |             |     |         |     |       |  | A                  |  |  |  |  |  |  |
| Maximum Instantaneous Forward Voltage at 1 A  | $V_F$           | 1.1   |             |     |         |     |       |  | V                  |  |  |  |  |  |  |
| Maximum DC Reverse Current at Rated DC Blocking Voltage   | $I_R$           | <div style="display: flex; justify-content: space-between;"> <span><math>T_a = 25\text{ }^\circ\text{C}</math></span> <span>5</span> </div> <div style="display: flex; justify-content: space-between;"> <span><math>T_a = 125\text{ }^\circ\text{C}</math></span> <span>50</span> </div> |             |     |         |     |       |  | $\mu\text{A}$      |  |  |  |  |  |  |
| Typical Junction Capacitance <sup>(1)</sup>   | $C_j$           | 15  |             |     |         |     |       |  | pF                 |  |  |  |  |  |  |
| Typical Thermal Resistance <sup>(2)</sup>   | $R_{\theta JA}$ | 75  |             |     |         |     |       |  | $^\circ\text{C/W}$ |  |  |  |  |  |  |
| Operating and Storage Temperature Range   | $T_j, T_{stg}$  | -55 ~ +150  |             |     |         |     |       |  | $^\circ\text{C}$   |  |  |  |  |  |  |
| <p>( 1 ) Measured at 1 MHz and applied reverse voltage of 4 V D.C<br/>( 2 ) P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.</p>   |                 |   |             |     |         |     |       |  |                    |  |  |  |  |  |  |

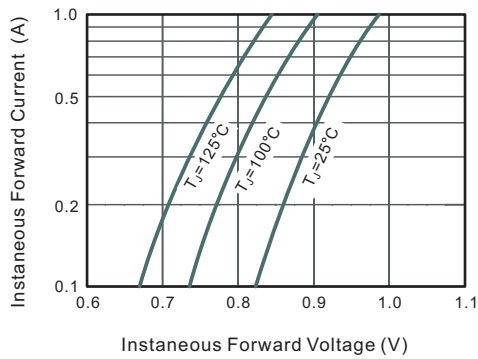
**Fig.1 Forward Current Derating Curve**



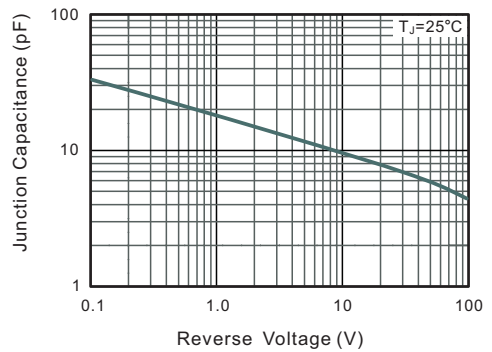
**Fig.2 Typical Instantaneous Reverse Characteristics**



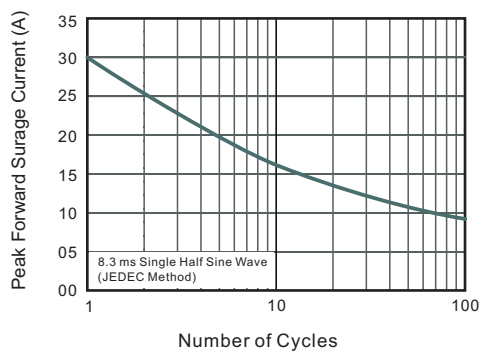
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



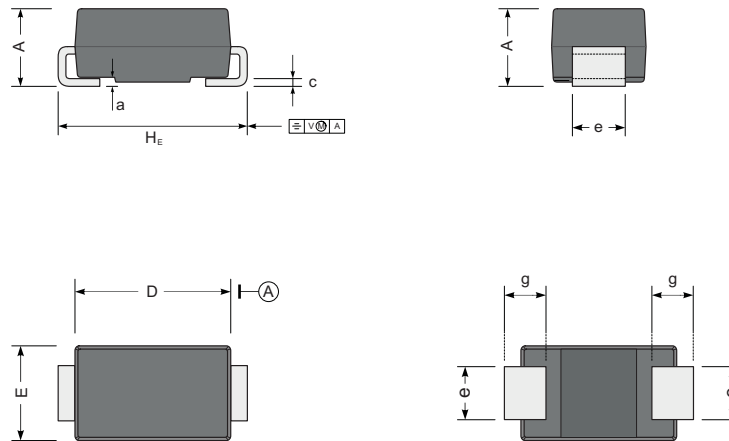
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**PACKAGE OUTLINE**

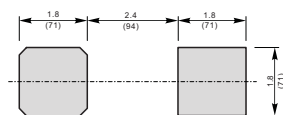
Plastic surface mounted package; 2 leads

SMA



| UNIT |     | A   | D   | E   | H <sub>E</sub> | c    | e   | g   | a   |
|------|-----|-----|-----|-----|----------------|------|-----|-----|-----|
| mm   | max | 2.2 | 4.5 | 2.7 | 5.2            | 0.31 | 1.6 | 1.5 | 0.3 |
|      | min | 1.9 | 4.0 | 2.3 | 4.7            | 0.15 | 1.3 | 0.9 |     |
| mil  | max | 87  | 181 | 106 | 205            | 12   | 63  | 59  | 12  |
|      | min | 75  | 157 | 91  | 185            | 6    | 51  | 35  |     |

**The recommended mounting pad size**



Unit :  $\frac{\text{mm}}{\text{mil}}$

**Marking**

| Type number | Marking code |
|-------------|--------------|
| M1          | M1           |
| M2          | M2           |
| M3          | M3           |
| M4          | M4           |
| M5          | M5           |
| M6          | M6           |
| M7          | M7           |

单击下面可查看定价，库存，交付和生命周期等信息

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