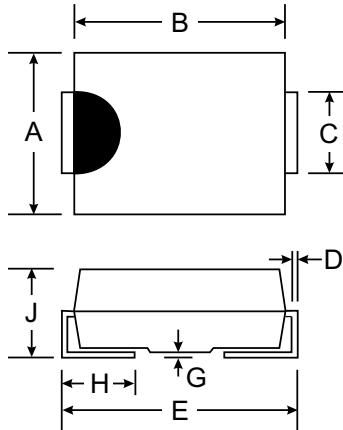


### Features

- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Capable of Meeting Environmental Standards of MIL-STD-19500
- Plastic Material - UL Flammability Classification 94V-0
- High Reliability
- Submersible Temperature of 265°C for 10 Seconds in Solder Bath

### Mechanical Data

- Case: SMB, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Notch
- Approx. Weight: 0.093 grams
- Mounting Position: Any



| SMB                  |      |      |
|----------------------|------|------|
| Dim                  | Min  | Max  |
| A                    | 3.30 | 3.94 |
| B                    | 4.00 | 4.65 |
| C                    | 1.95 | 2.21 |
| D                    | 0.15 | 0.40 |
| E                    | 5.00 | 6.00 |
| G                    | 0.10 | 0.20 |
| H                    | 0.76 | 1.52 |
| J                    | 2.00 | 2.62 |
| All Dimensions in mm |      |      |

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, halfwave, 60Hz resistive or inductive load.

| Characteristic                                                                                                       | Symbol          | SK12        | SK13 | SK14 | SK15 | SK16 | Units |
|----------------------------------------------------------------------------------------------------------------------|-----------------|-------------|------|------|------|------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                                               | $V_{RRM}$       | 20          | 30   | 40   | 50   | 60   | V     |
| Maximum RMS Voltage                                                                                                  | $V_{RMS}$       | 14          | 21   | 28   | 35   | 42   | V     |
| Maximum DC Blocking Voltage                                                                                          | $V_{DC}$        | 20          | 30   | 40   | 50   | 60   | V     |
| Maximum Average Forward Rectified Current<br>@ $T_A = 75^\circ\text{C}$                                              | $I_{(AV)}$      | 1.0         |      |      |      |      | A     |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)                    | $I_{FSM}$       | 25          |      |      |      |      | A     |
| Maximum Instantaneous Forward Voltage at 1.0A                                                                        | $V_F$           | 0.55        |      |      | 0.70 |      | V     |
| Maximum DC Reverse Current at Rated DC Blocking Voltage<br>@ $T_A = 25^\circ\text{C}$<br>@ $T_A = 100^\circ\text{C}$ | $I_R$           | 0.5<br>10   |      |      |      |      | mA    |
| Maximum Full Load Reverse Current Full Cycle Average<br>@ $T_A = 75^\circ\text{C}$                                   | $I_R$           | 5           |      |      |      |      | mA    |
| Maximum Thermal Resistance (See Note 1)                                                                              | $R_{\theta JL}$ | 25          |      |      |      |      | °C/W  |
| Typical Junction Capacitance (See Note 2)                                                                            | $C_J$           | 110         |      |      |      |      | pF    |
| Operating Temperature Range                                                                                          | $T_J$           | -65 to +125 |      |      |      |      | °C    |
| Storage Temperature Range                                                                                            | $T_{STG}$       | -65 to +150 |      |      |      |      | °C    |

- Notes: 1. Thermal resistance from junction to lead.  
2. Measured at 1.0MHz and applies reverse voltage of 4.0V.

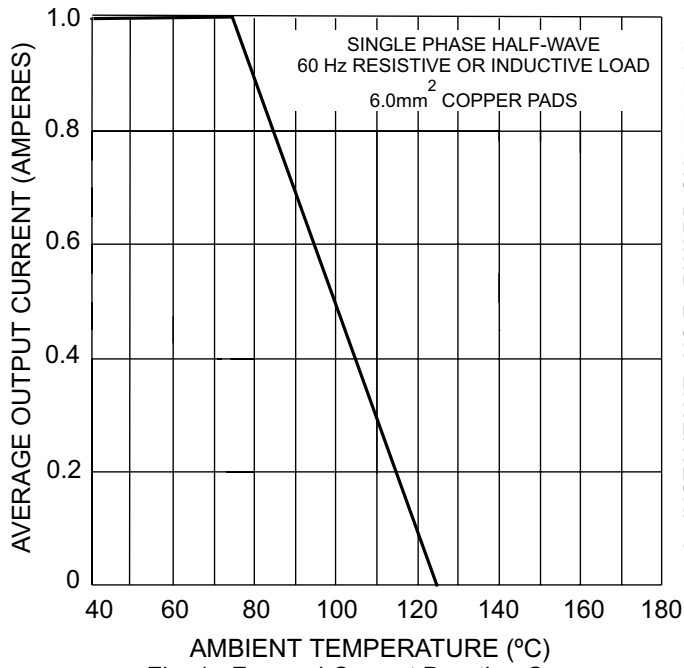


Fig. 1, Forward Current Derating Curve

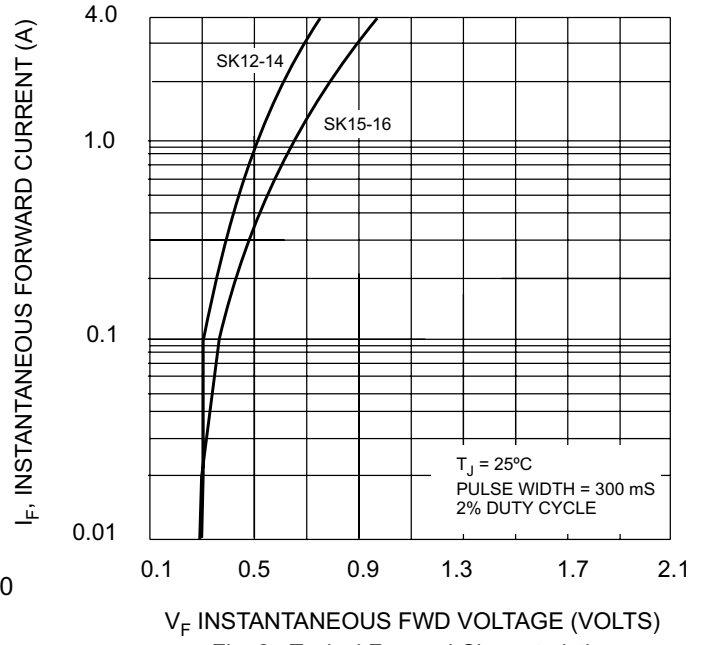


Fig. 2, Typical Forward Characteristics

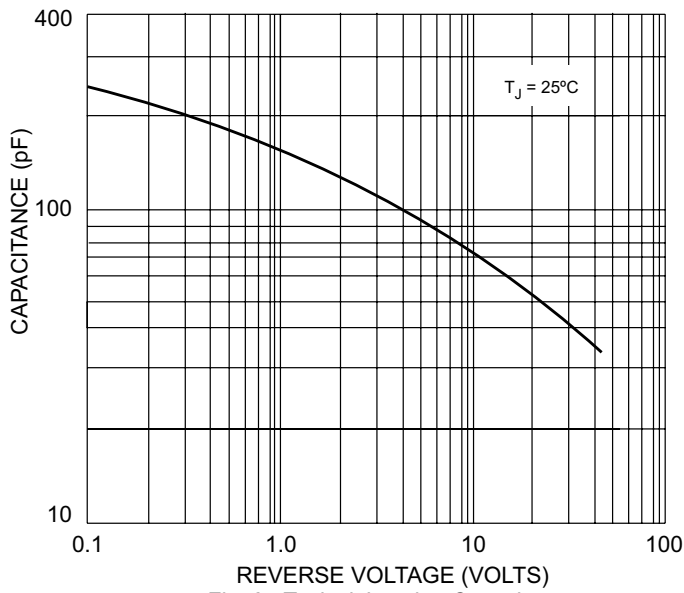


Fig. 3, Typical Junction Capacitance

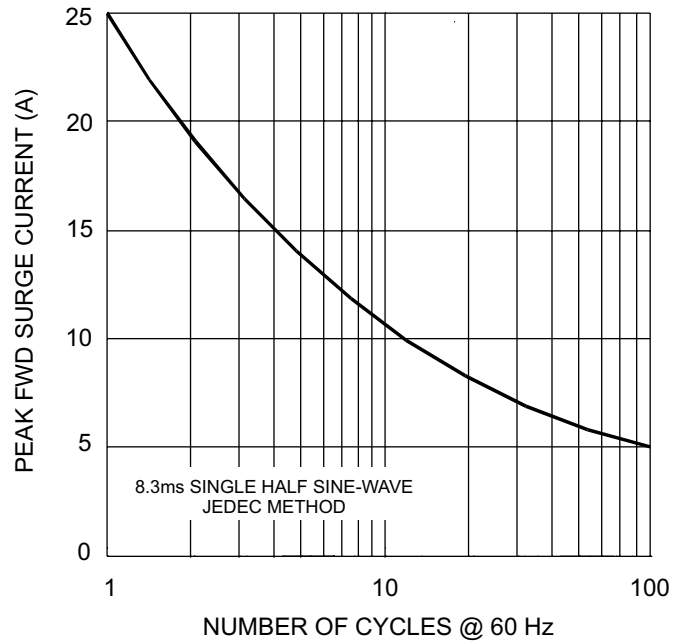


Fig. 4, Max Non-Repetitive Peak Fwd Surge Current