

VOLTAGE RANGE: 20 - 100V

CURRENT: 6.0 A

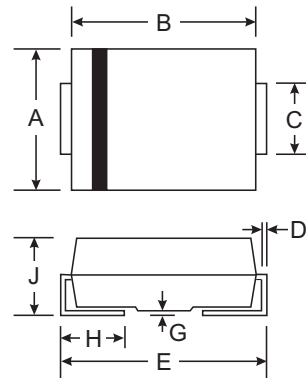
Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0



Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)



| SMC/DO-214AB | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 5.59 | 6.22 |
| B | 6.60 | 7.11 |
| C | 2.75 | 3.18 |
| D | 0.15 | 0.31 |
| E | 7.75 | 8.13 |
| G | 0.10 | 0.20 |
| H | 0.76 | 1.52 |
| J | 2.00 | 2.62 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic | Symbol | SK62 | SK63 | SK64 | SK645 | SK65 | SK66 | SK68 | SK610 | Unit |
|---|--------------|-------------|------|------|-------|------|------|------|-------|------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 45 | 50 | 60 | 80 | 100 | V |
| Working Peak Reverse Voltage | V_{RWM} | | | | | | | | | |
| DC Blocking Voltage | V_R | | | | | | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 14 | 21 | 28 | 31.5 | 35 | 42 | 56 | 71 | V |
| Average Rectified Output Current @ $T_L = 90^\circ\text{C}$ | I_o | 6.0 | | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 150 | | | | | | | | A |
| Forward Voltage @ $I_F = 6.0\text{A}$ | V_{FM} | 0.65 | | | | 0.85 | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ | I_{RM} | 1.0 | | | | | | | | mA |
| At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$ | | 20 | | | | | | | | |
| Typical Junction Capacitance Measured at 1.0MHz, $V_R = 4.0\text{V}$ | C_J | 200 | | | | | | | | pF |
| Operating Temperature Range | T_j | -65 to +125 | | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -65 to +150 | | | | | | | | $^\circ\text{C}$ |

Note: 1. Mounted on P.C. Board with 14mm² copper pad area.

RATINGS AND CHARACTERISTIC CURVE SK62 THRU SK610

FIG. 1 - FORWARD CURRENT DERATING CURVE

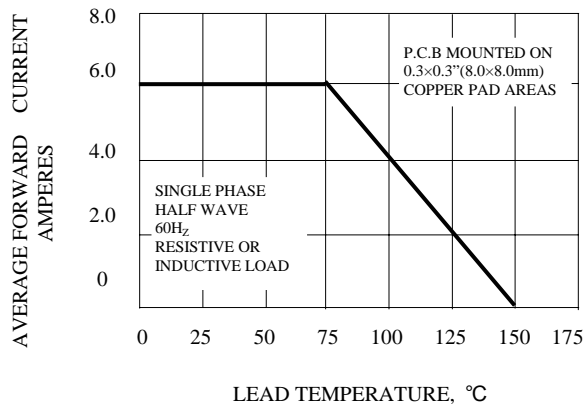


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

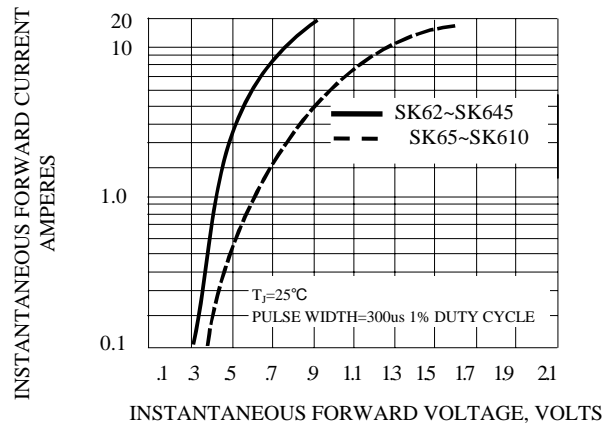


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

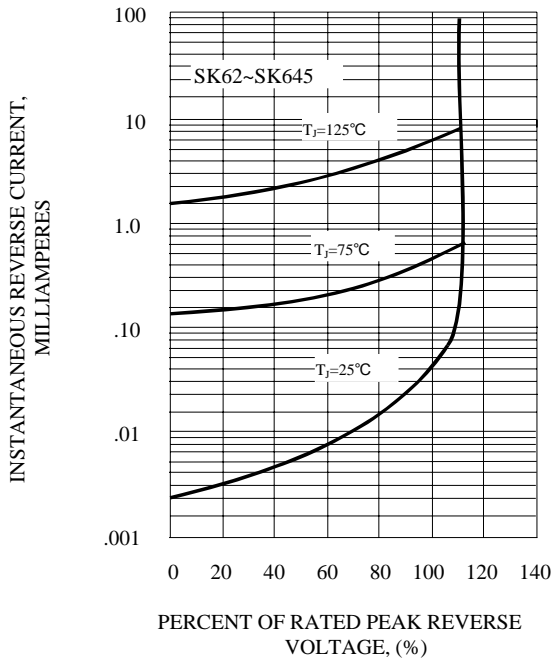


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

