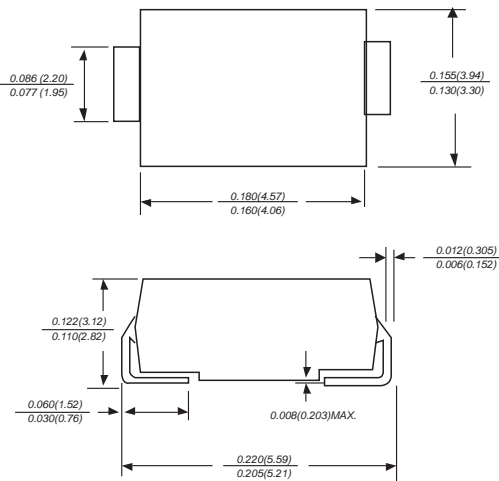


# SK32 THRU SK310

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 3.0 Amperes

### DO-214AA



Dimensions in inches and (millimeters)

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

### MECHANICAL DATA

**Case:** JEDEC DO-214AA molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.005 ounce, 0.138 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

|   | SYMBOLS         | SK32        | SK33 | SK34 | SK35        | SK36 | SK38 | SK310 | UNITS |
|---|-----------------|-------------|------|------|-------------|------|------|-------|-------|
| Maximum repetitive peak reverse voltage   | $V_{RRM}$       | 20          | 30   | 40   | 50          | 60   | 80   | 100   | VOLTS |
| Maximum RMS voltage   | $V_{RMS}$       | 14          | 21   | 28   | 35          | 42   | 56   | 70    | VOLTS |
| Maximum DC blocking voltage   | $V_{DC}$        | 20          | 30   | 40   | 50          | 60   | 80   | 100   | VOLTS |
| Maximum average forward rectified current at $T_L$ (see fig.1)                                      | $I_{(AV)}$      | 3.0         |      |      |             |      |      |       | Amps  |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$       | 100.0       |      |      |             |      |      |       | Amps  |
| Maximum instantaneous forward voltage at 3.0A   | $V_F$           | 0.55        |      | 0.70 |             | 0.85 |      | Volts |       |
| Maximum DC reverse current<br>at rated DC blocking voltage  | $I_R$           | 0.5         |      |      |             |      |      |       | mA    |
| $T_A=25^\circ\text{C}$<br>$T_A=100^\circ\text{C}$   |                 | 20          |      |      | 10          |      |      |       |       |
| Typical junction capacitance (NOTE 1)   | $C_J$           | 500         |      |      | 300         |      |      | pF    |       |
| Typical thermal resistance (NOTE 2)   | $R_{\theta JA}$ | 55.0        |      |      |             |      |      |       | °C/W  |
| Operating junction temperature range  | $T_J$           | -65 to +125 |      |      | -65 to +150 |      |      | °C    |       |
| Storage temperature range   | $T_{STG}$       | -65 to +150 |      |      |             |      |      |       | °C    |

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES SK32 THRU SK310

