

SK32 THRU S310

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
VOLTAGE - 20 TO 100 Volts CURRENT - 3.0 Amperes

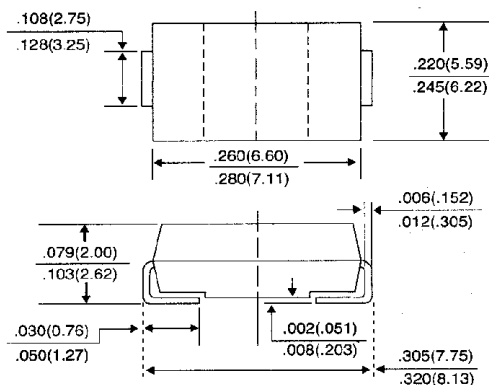
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier majority carrier conduction
- Low power loss, high efficiency
- High current capability, low V_f
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic
 Terminals: Solder plated solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes cathode
 Standard Packaging: 16mm tape (EIA-481)
 Weight: 0.007 ounces 0.21 gram

SMC/DO-214AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Resistive or inductive load.

| | SYMBOLS | SK32 | SK33 | SK34 | SK35 | SK36 | SK38 | SK39 | S310 | UNITS |
|--|------------------------------------|------|------|------|------|-------------|------|------|------|--------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | Volts |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 64 | 71 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | Volts |
| Maximum Average Forward Rectified Current at $T_L = 75^\circ\text{C}$ | $I_{(AV)}$ | 3.0 | | | | | | | | Amps |
| Peak forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 100 | | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage at 3.0A (NOTE 1) | V_f | 0.50 | | | 0.75 | | 0.85 | | | Volts |
| Maximum DC Reverse Current (NOTE 1) $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$ | I_R | | | | | 0.5 20.0 | | | | mA |
| Maximum Thermal Resistance (NOTE 2) | $R_{\theta JL}$ $R_{\theta JA}$ | | | | | 17 55 | | | | $^\circ\text{C/W}$ |
| Operating Junction Temperature Range | T_J | | | | | -50 to +125 | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | | | | | -50 to +150 | | | | $^\circ\text{C}$ |

NOTES:

1. Pulse Test with $PW = 300\mu\text{sec}$, 2% Duty Cycle.
2. Mounted on P.C. Board with 14 mm² (.013mm thick) copper pad areas.

**RATING AND CHARACTERISTIC CURVES
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