

SK32 thru SK36

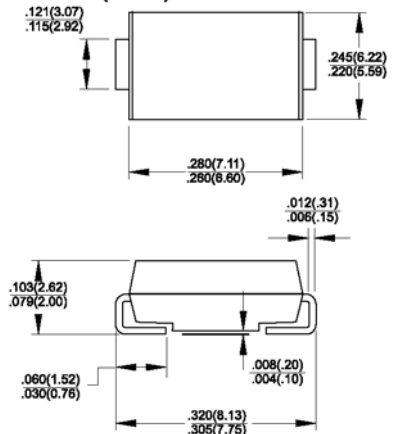
Surface Mount Schottky Barrier Rectifiers
Reverse Voltage 20 to 60 Volts Forward Current 3.0 Amperes

Features

- ◆ For surface mounted applications
- ◆ Metal-Semiconductor junction with guarding
- ◆ Epitaxial construction
- ◆ Very low forward voltage drop
- ◆ High current capability
- ◆ Plastic material has UL flammability classification 94V-0
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



DO-214AB (SMC)



Mechanical Data

- ◆ Case : JEDEC DO-214AB(SMC) molded plastic
- ◆ Polarity : Color band denotes cathode
- ◆ Weight : 0.009 ounce, 0.25 gram

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, derate current by 20%

| Parameter | Symbols | SK32 | SK33 | SK34 | SK35 | SK36 | Units |
|---|----------------------|-------------|------|-----------|------|------|---------------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | Volts |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | Volts |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | Volts |
| Maximum average forward rectified current @ $T_J = 100^\circ\text{C}$ | I_{AV} | 3.0 | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 100.0 | | | | | Amps |
| Maximum forward voltage at 3.0A DC | V_F | 0.50 | | 0.70 | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage @ $T_J = 25^\circ\text{C}$ @ $T_J = 100^\circ\text{C}$ | I_R | | | 0.5 20 | | | mA |
| Typical junction capacitance (Note 1) | C_J | 250 | | | | | pF |
| Typical thermal resistance (Note 2,3) | R_{JL} R_{JA} | 10 50 | | | | | $^\circ\text{C}/\text{W}$ |
| Operating junction temperature range | T_J | -55 to +125 | | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -55 to +150 | | | | | $^\circ\text{C}$ |

- Notes:**
1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 2. Thermal Resistance Junction to Lead.
 3. Thermal Resistance Junction to Ambient.

RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

