# SK82~SK810

## Schottky rectifier

### Major Ratings and Characteristics

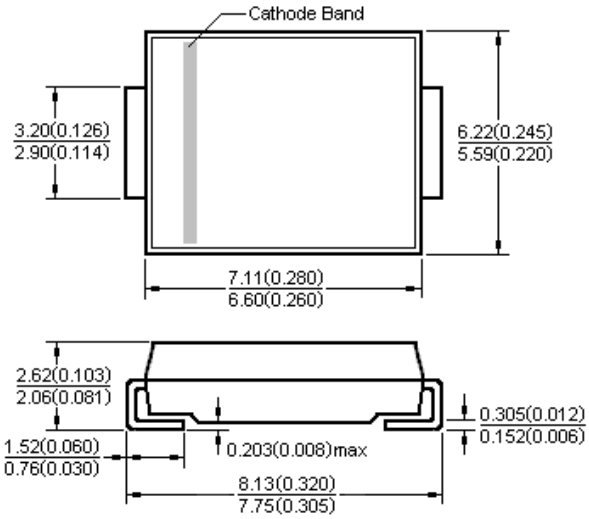
| | |
|---|---|
| $I_{F(AV)}$ | 8.0 A |
| $V_{RRM}$ | 20 V to 100 V |
| $I_{FSM}$ | 200 A |
| $V_F$ | 0.50V , 0.55 V , 0.70 V, 0.85V |
| $T_j$ max. | 150 °C |

SMC ( DO – 214AB )

### Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering：
  260℃/10 seconds at terminals
- Component in accordance to
  RoHS 2002/95/1 and WEEE 2002/96/EC

SMC ( DO – 214AB )




Dimentsions in millimeters and (inchs)

### Mechanical Date

- **Case:** JEDEC DO-214AB molded plastic body over passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end

### Maximum Ratings & Thermal Characteristics & Electrical Characteristics

($T_A$ = 25 °C unless otherwise noted)

| | Symbol | SK82 | SK83 | SK84 | SK85 | SK86 | SK88 | SK810 | UNIT |
|---|---|---|---|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum RMS voltage | $V_{RMS}$ | 14 | 21 | 28 | 35 | 42 | 56 | 70 | V |
| Maximum DC blocking voltage | $V_{DC}$ | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum average forward rectified current | $I_{F(AV)}$ | 8.0 | | | | | | | A |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | $I_{FSM}$ | 200 | | | | | | | A |
| Maximum instantaneous forwad voltage at 8.0A | $V_F$ | 0.50 | 0.55 | | 0.70 | | 0.85 | | V |
| Maximum DC reverse current $T_A$ = 25 ℃ | $I_R$ | 1.0 | | | | | | | mA |
| at Rated DC blocking voltage $T_A$ = 100℃ | | 20 | | | | | | | |
| Thermal resistance from junction to ambient | $R_{\theta JL}$ | 20 | | | | | | | ℃/ W |
| Operating junction and storage temperature range | $T_J$, $T_{STG}$ | –65 to +150 | | | | | | | ℃ |

## Characteristic Curves ($T_A$=25 ℃ unless otherwise noted)

**Fig.1 Forward Current Derating Curve**

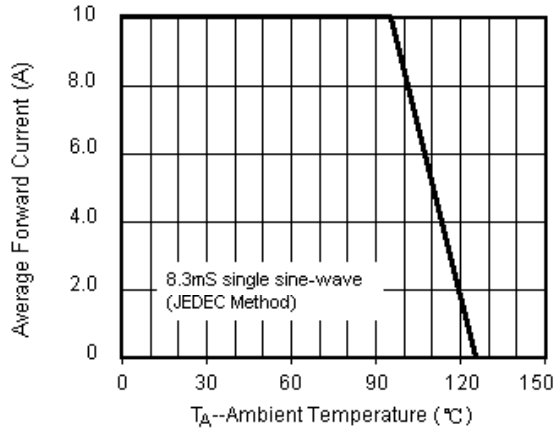



**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**

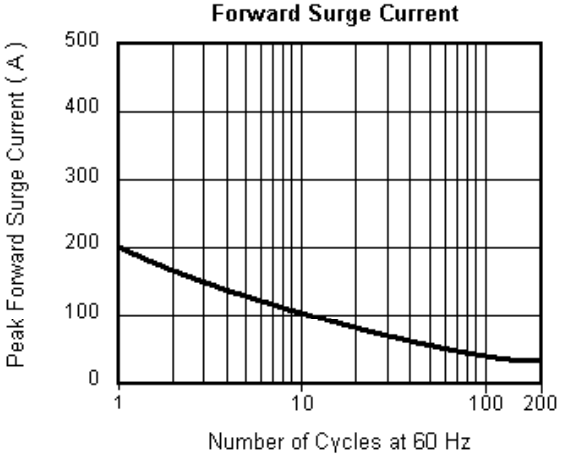



**Fig.3 Typical Instantaneous Forward Characteristics**

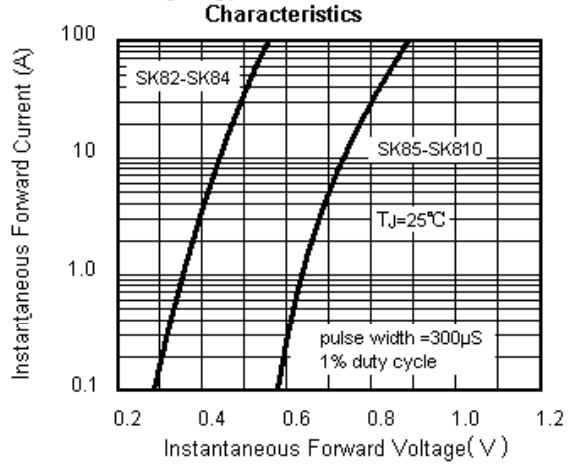



**Fig.4 Typical Reverse Leakage Characteristics**

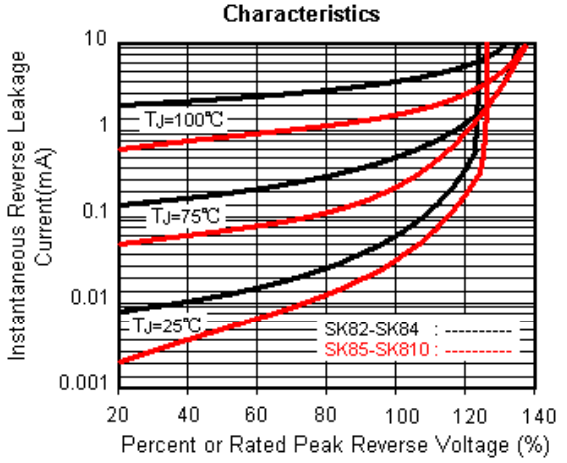



**Fig.5 Typical Junction Capacitance**