

Major Ratings and Characteristics

$I_{F(AV)}$	3.0 A
V_{RRM}	20 V to 100 V
I_{FSM}	100 A
V_F	0.55 V, 0.70 V, 0.85V
T_j max.	150 °C



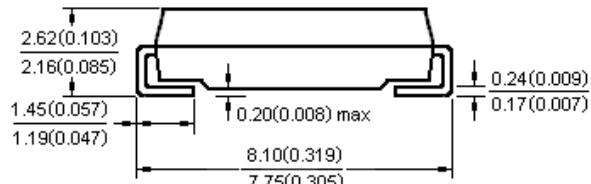
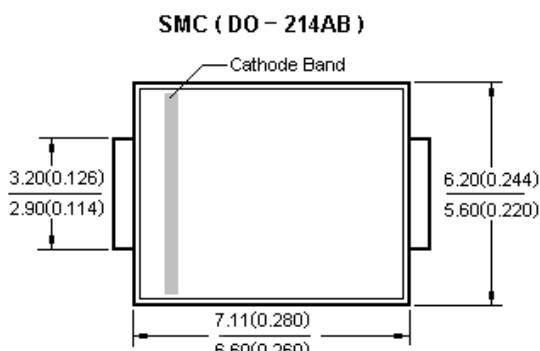
SMC (DO-214AB)

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 °C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC

Mechanical Data

- 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



Dimensions in millimeters and (inches)

Maximum Ratings & Thermal Characteristics & Electrical Characteristics

(TA = 25 °C unless otherwise noted)

	Symbol	SK32 (SS32)	SK33 (SS33)	SK34 (SS34)	SK35 (SS35)	SK36 (SS36)	SK38 (SS38)	SK310 (SS310)	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	$I_{F(AV)}$				3				A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}				100				A
Maximum instantaneous forward voltage at 3.0A	V_F		0.55		0.70		0.85		V
Maximum DC reverse current $T_A = 25^\circ C$ at Rated DC blocking voltage $T_A = 120^\circ C$	I_R			0.5					mA
				5					mA
Voltage rate of change (rated VR)	dv/dt			10000					V/μs
Thermal resistance from junction to ambient	$R_{\theta JA}$			88					°C/W
Operating junction and storage temperature range	T_J, T_{STG}			– 65 to +150					°C

SK32~SK310(SS32~SS310) SMC

Schottky rectifier



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

Fig.1 Forward Current Derating Curve

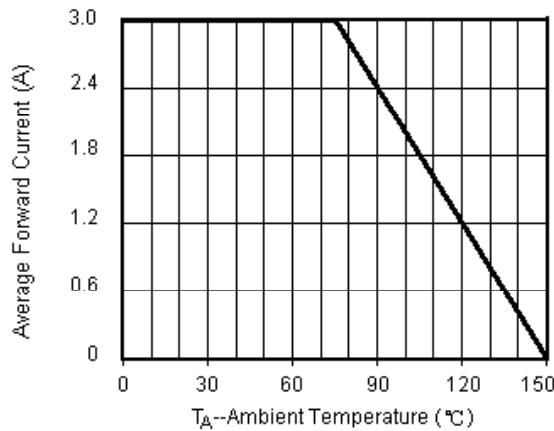


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

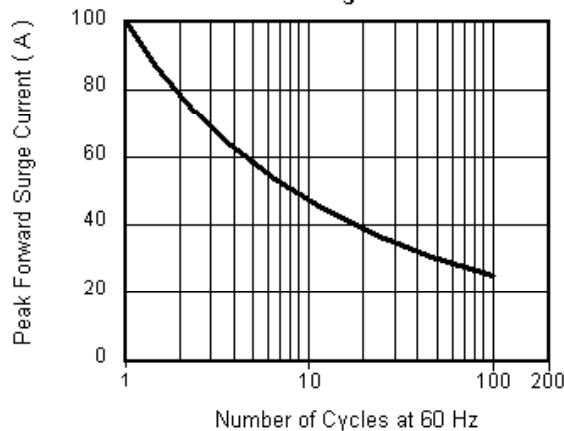


Fig.3 Typical Instantaneous Forward Characteristics

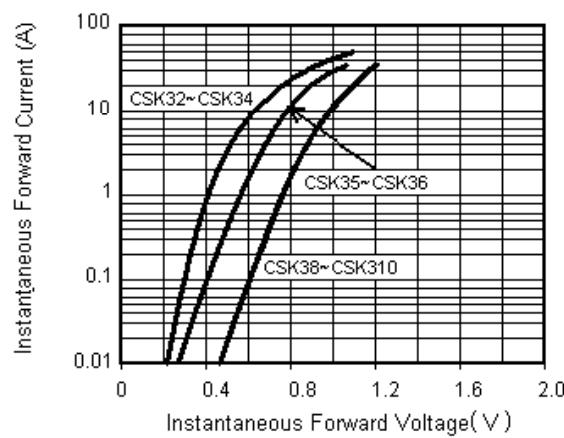


Fig.4 Typical Reverse Leakage Characteristics

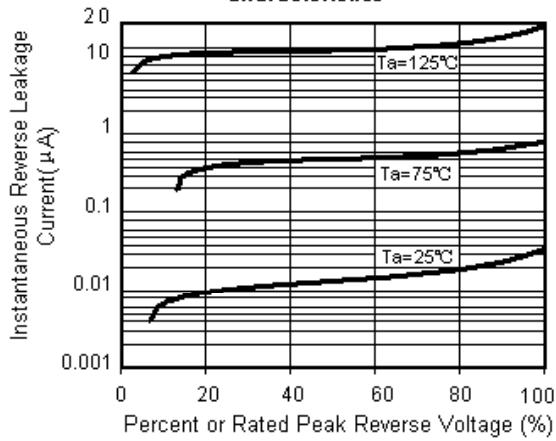


Fig.5 Typical Junction Capacitance

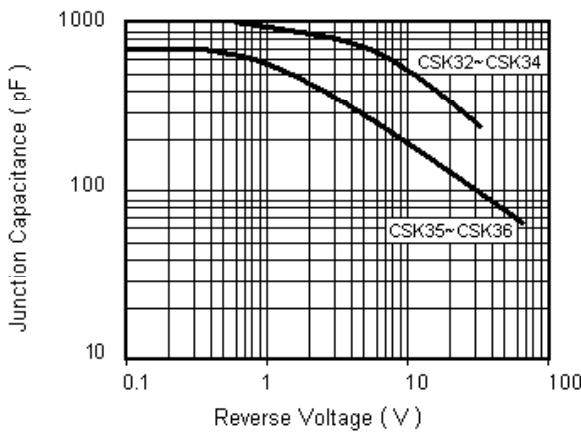


Fig.6 Transient Thermal Impedance

