



SK52~SK510

Surface Mount Schottky Rectifiers

Major Ratings and Characteristics

$I_{F(AV)}$	5.0 A
V_{RRM}	20 V to 100 V
I_{FSM}	150 A
V_F	0.55 V, 0.70 V, 0.85V
$T_J \text{ max.}$	150 °C



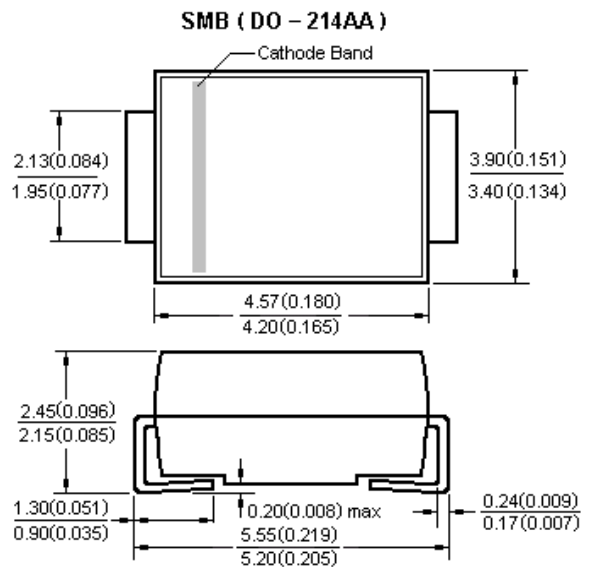
SMB (DO - 214AA)

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



Maximum Ratings & Thermal Characteristics & Electrical Characteristics

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

	Symbol	SK52	SK53	SK54	SK55	SK56	SK58	SK510	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)}	5							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150							A
Maximum instantaneous forward voltage at 5.0A	V _F	0.55			0.70		0.85		V
Maximum DC reverse current at Rated DC blocking voltage	I _R	0.5							mA
		10					20		mA
Voltage rate of change (rated VR)	dv/dt	10000							V/μs
Thermal resistance from junction to ambient	R _{θJA}	88							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +150							°C



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

Fig.1 Forward Current Derating Curve

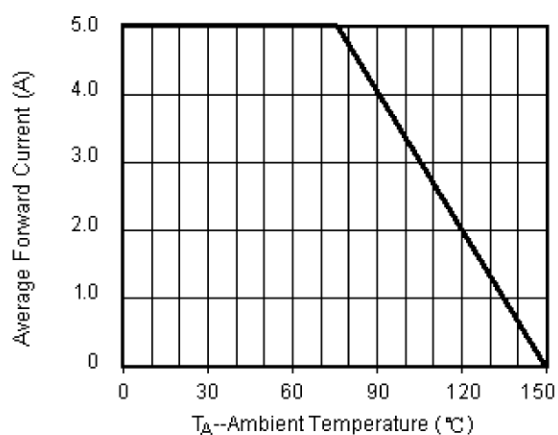


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

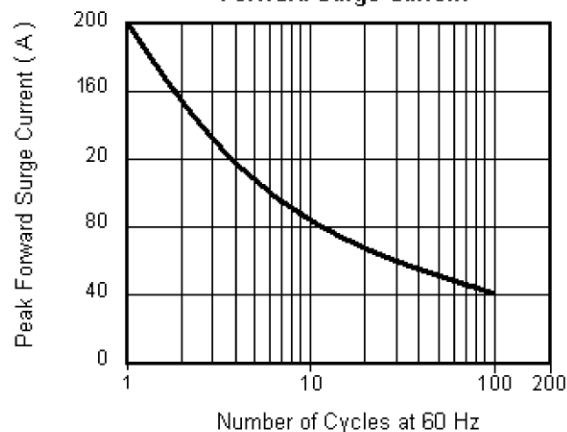


Fig.3 Typical Instantaneous Forward Characteristics

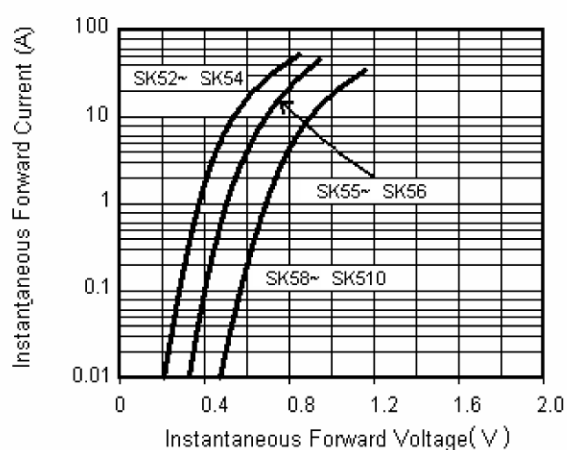


Fig.4 Typical Reverse Leakage Characteristics

