



SK1045C

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

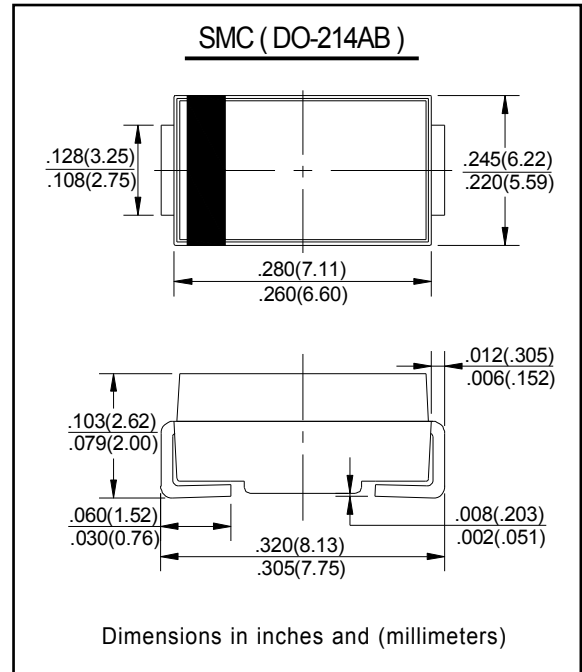
Reverse Voltage - 45 Volts Forward Current - 10.0 Ampere

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC SMC(DO-214AB) molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.007 ounce, 0.24grams



Maximum Ratings and Electrical Characteristics @_{T_A}=25°C unless otherwise specified

Characteristic	Symbol	SK1045C	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	45	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	31.5	V
Average Rectified Output Current	I _O	10.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	275	A
Forward Voltage @ _{I_F} = 10.0A	V _{FM}	0.47	V
Peak Reverse Current @ _{T_A} = 25°C At Rated DC Blocking Voltage @ _{T_A} = 100°C	I _{RM}	0.5 100	mA
Typical Thermal Resistance (Note 1)	R _{θJL} R _{θJA}	14 50	°C/W
Operating Temperature Range	T _j	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Note: 1. Mounted on P.C. Board with 5.0mm² copper pad area.



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RATINGS AND CHARACTERISTIC CURVES

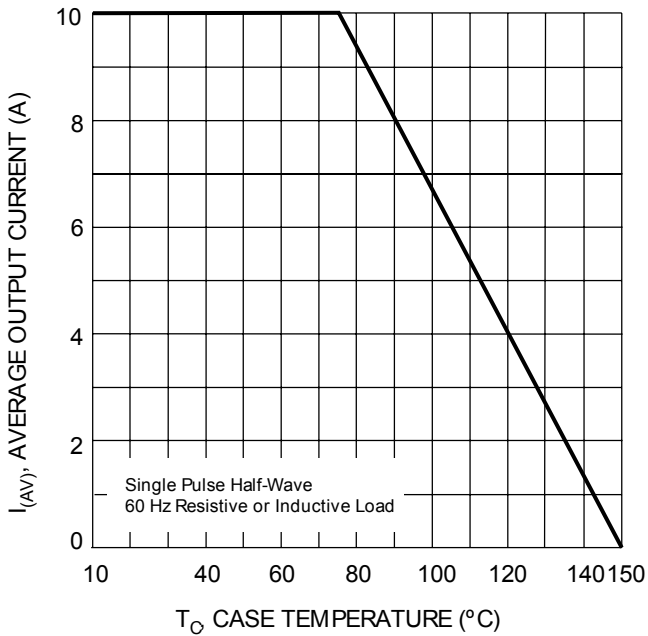


Fig. 1 Forward Current Derating Curve

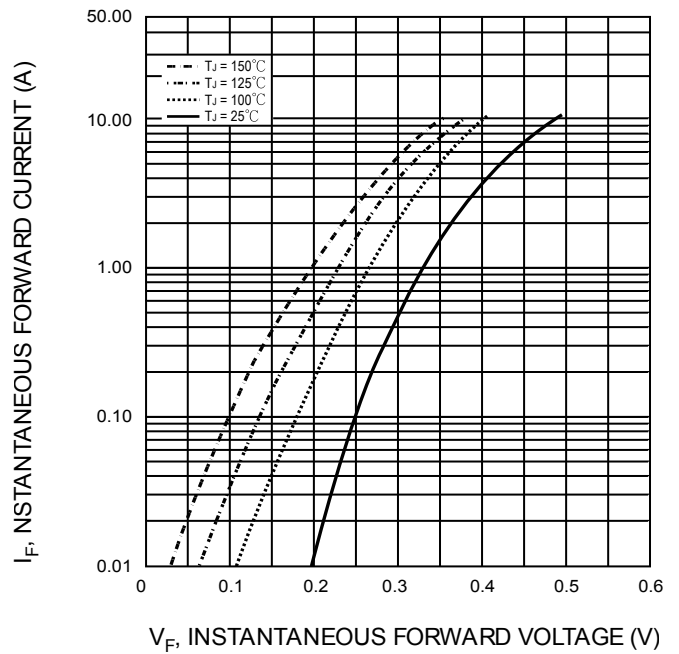


Fig. 2 Typical Forward Characteristics

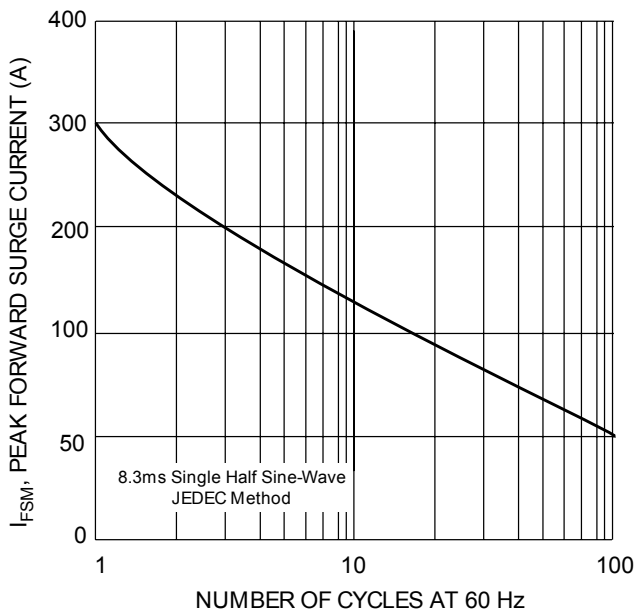


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

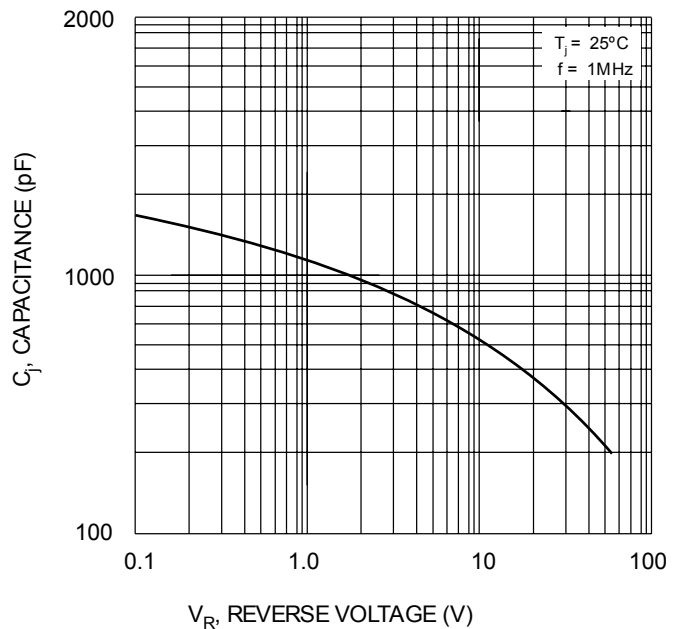


Fig. 4 Typical Junction Capacitance