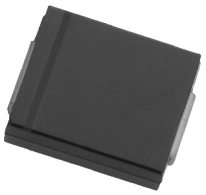
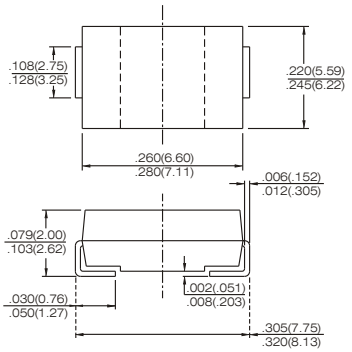
SK1040C thru SK10100C

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 40 TO 100 VOLTS CURRENT - 10 AMPERES



SMC/DO-214AB



Dimensions in inches and (millimeters)

FEATURES

- Low profile package
- Ideal for automated placement
- Guard Ring for over voltage protection
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC

MECHANICAL DATA

- Case: DO-214AB (SMC)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.231 grams (approximate)

MAXIMUM RATIXGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified
Resistive or inductive load

PARAMETER	SYMBOL	SK1040C	SK1060C	SK10100C	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	40	60	100	V
Maximum RMS voltage	V_{RMS}	28	42	70	V
Maximum DC blocking voltage	V_{DC}	40	60	100	V
Maximum average forward rectified current	I_F	10.0			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0			A
Maximum instantaneous I_F=10A @ 25°C	V_F	0.55	0.70	0.85	V
Maximum DC reverse current @ TA=25℃	I_R	0.5		0.2	mA
at rated DC blocking voltage @ TA=100°C		25.0		15.0	
Typical junction capacitance(NOTE1)	C_J	380			pF
Typical thermal resistance	$R_{\theta JC}$	75			°C/W
Operating temperature range	T_J	-50 to +125			°C
Storage temperature range	T_{STG}	-65 to +150			°C

NOTES:1.Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

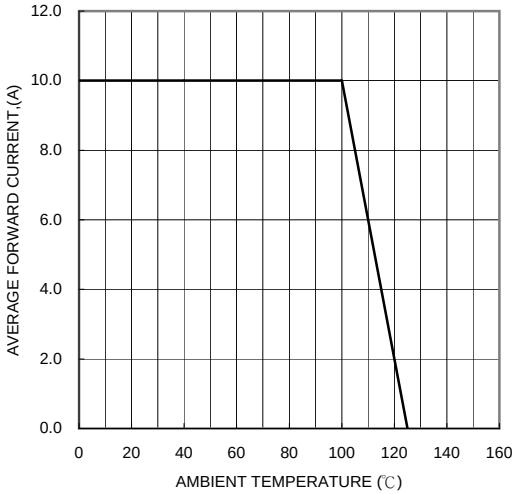


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

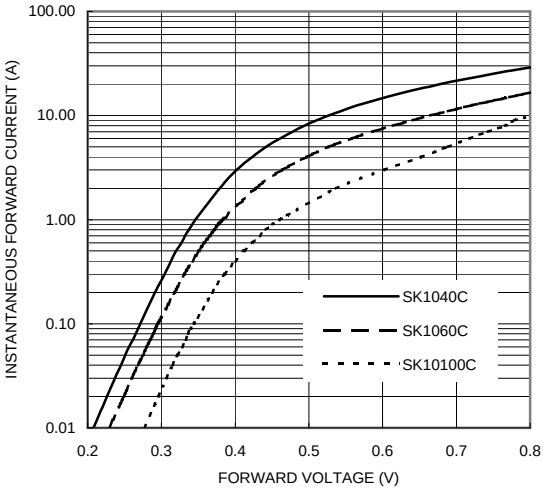


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

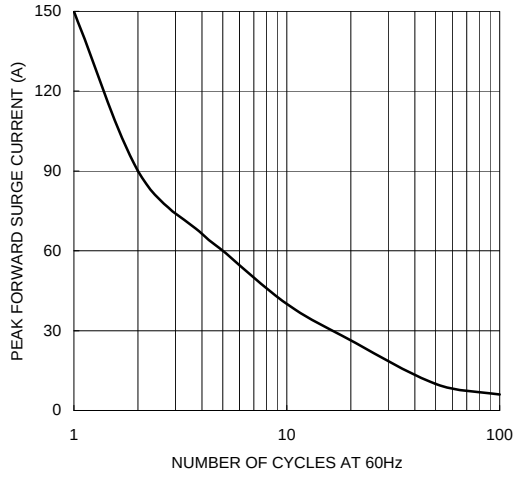


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

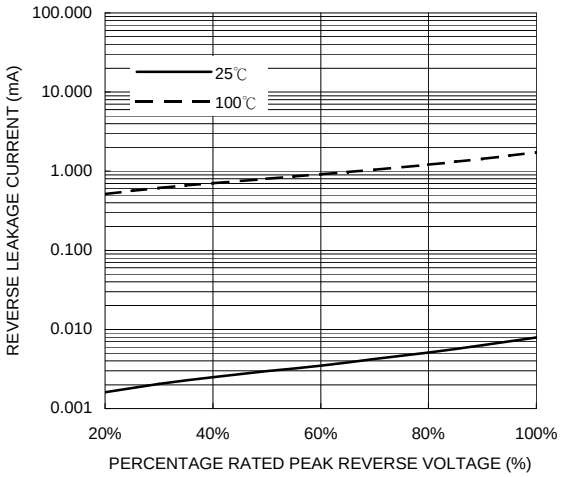


FIG. 5-TYPICAL JUNCTION CAPACITANCE