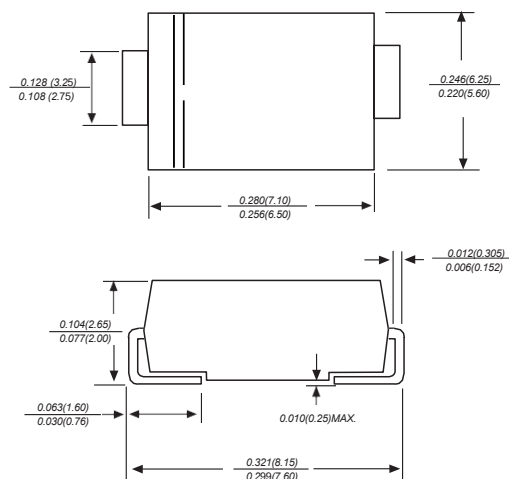


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

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

DO-214AB/SMC



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	SK104C SK1045C	SK106C	SK1010C	SK1020C	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	45	60	100	200	V
Maximum RMS voltage	V_{RMS}	32	42	70	140	V
Maximum DC Blocking Voltage	V_{DC}	45	60	100	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10.0				A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150				A
Max Instantaneous Forward Voltage @10.0 A	V_F	0.55	0.75	0.95	0.95	V
Maximum DC Reverse Current at $T_a = 25^{\circ}C$ Rated DC Reverse Voltage $T_a = 100^{\circ}C$	I_R	0.5 50				mA
Typical thermal resistance	$R_{\theta JA}$	25				$^{\circ}C/W$
Operating Junction Temperature Range	T_j	-55 ~ +150				$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 ~ +150				$^{\circ}C$

Typical Characteristics

Fig.1 Forward Current Derating Curve

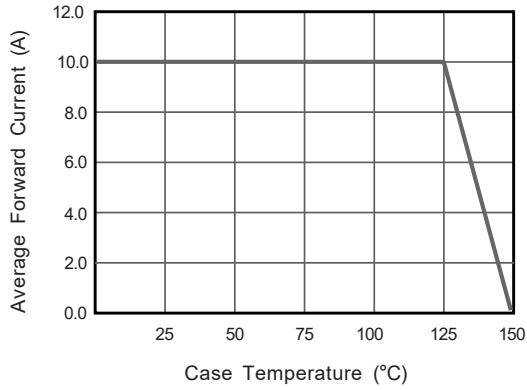


Fig.2 Typical Reverse Characteristics

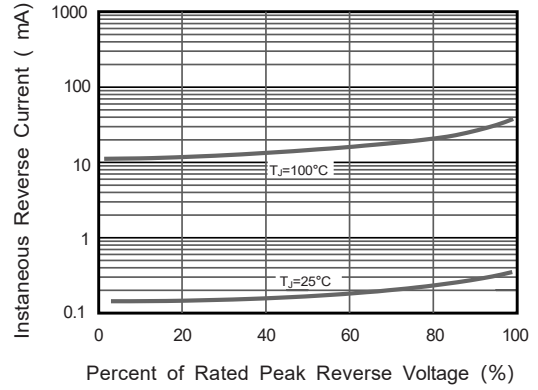


Fig.3 Typical Forward Characteristic

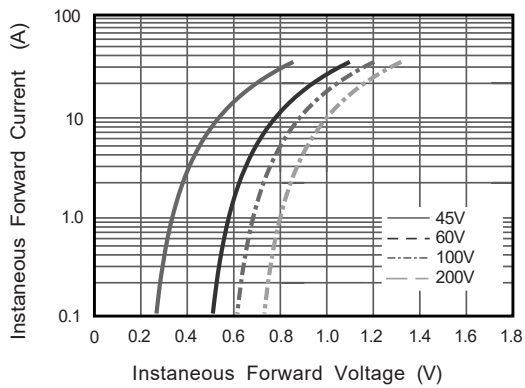


Fig.4 Typical Junction Capacitance

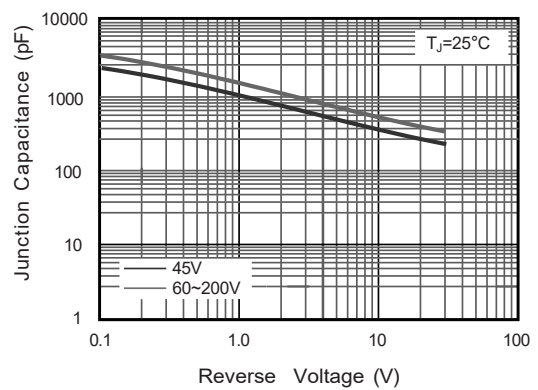


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

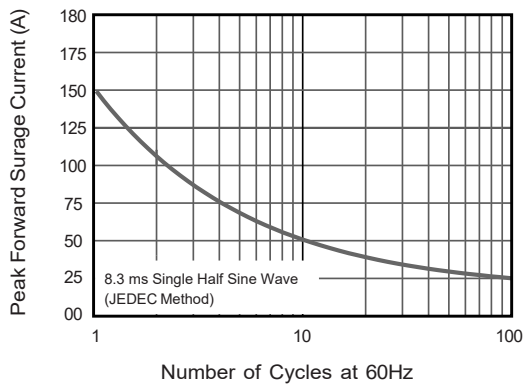
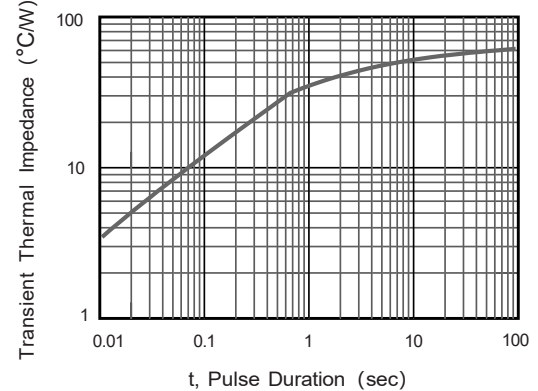


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.