

## SK1045 THRU SK10200 10.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.21 grams

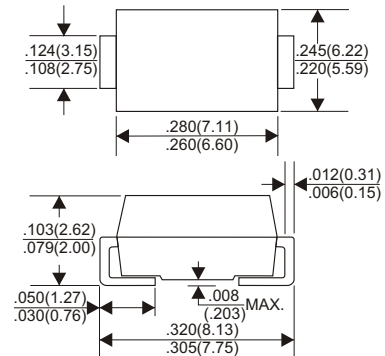
### VOLTAGE RANGE

45 to 200 Volts

### CURRENT

10.0Ampere

### DO-214AB(SMC)



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SK1045	SK1060	SK10100	SK10150	SK10200	UNITS
Maximum Recurrent Peak Reverse Voltage	45	60	100	150	200	V
Maximum RMS Voltage	32	42	70	105	140	V
Maximum DC Blocking Voltage	45	60	100	150	200	V
Maximum Average Forward Rectified Current See Fig. 1	10.0					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	175					A
Maximum Instantaneous Forward Voltage at 10.0A	0.55	0.7	0.85	0.92		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	0.1 5		0.02 2			μA mA
Typical Junction Capacitance (Note1)	440					pF
Typical Thermal Resistance R <sub>JA</sub> (Note 2)	60					°C/W
Operating Temperature Range T <sub>J</sub>	—		-55 to +150		—	°C
Storage Temperature Range T <sub>stg</sub>	-55 to +150					°C

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

## RATING AND CHARACTERISTIC CURVES (SK1045 THRU SK10200)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

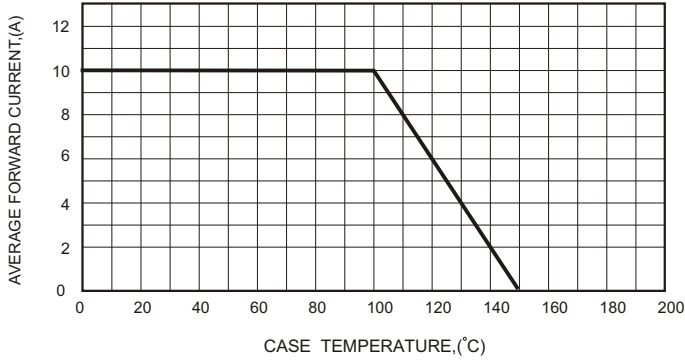


FIG.2-TYPICAL FORWARD CHARACTERISTICS

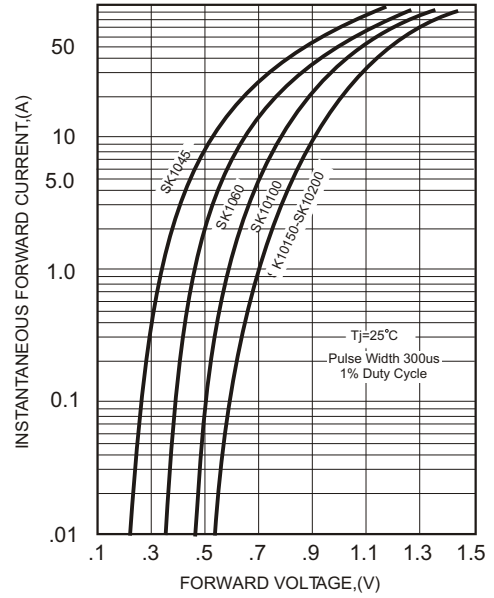


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

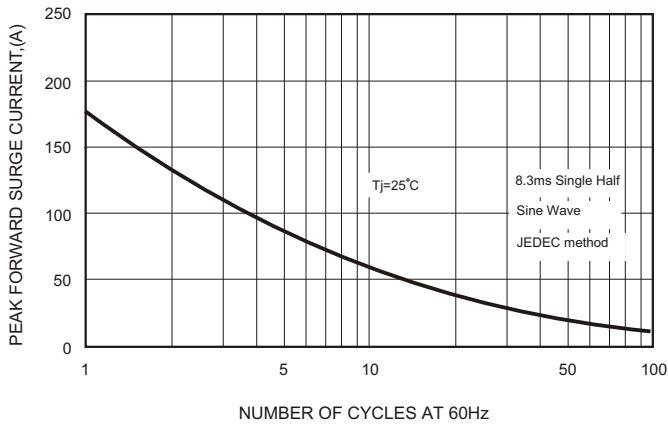


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

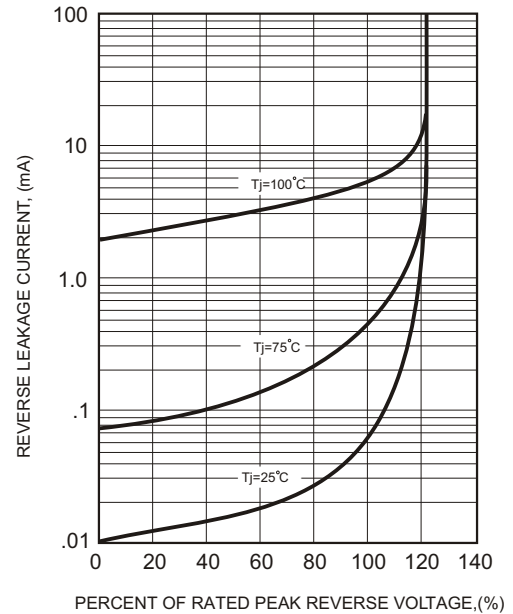


FIG.4-TYPICAL JUNCTION CAPACITANCE

