



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

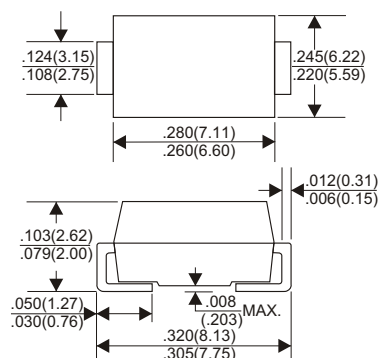
VOLTAGE RANGE

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	10.0					A
See Fig. 1						
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 Ta=25°C	0.1			0.02		μA
at Rated DC Blocking Voltage Ta=125°C	5			2		mA
Typical Junction Capacitance (Note1)	440					pF
Typical Thermal Resistance R JA (Note 2)	60					°C/W
Operating Temperature Range Tj	-55 to +150					°C
Storage Temperature Range Tstg	-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

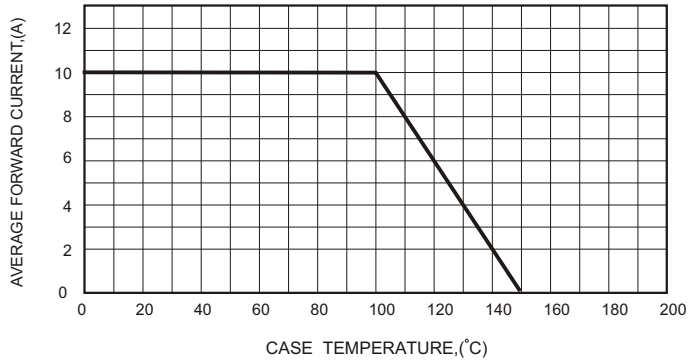


FIG.2-TYPICAL FORWARD CHARACTERISTICS

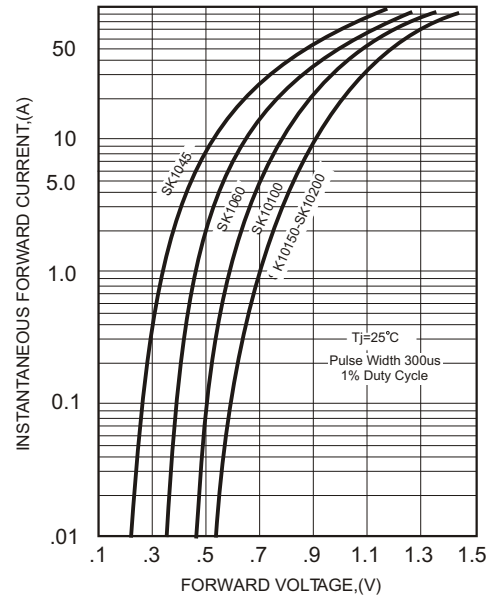


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

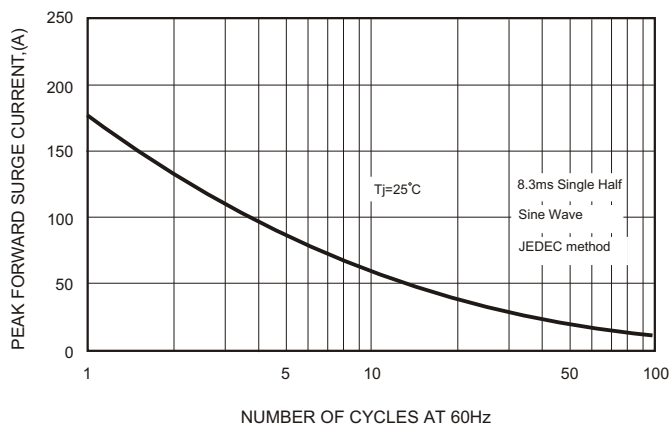


FIG.4-TYPICAL JUNCTION CAPACITANCE

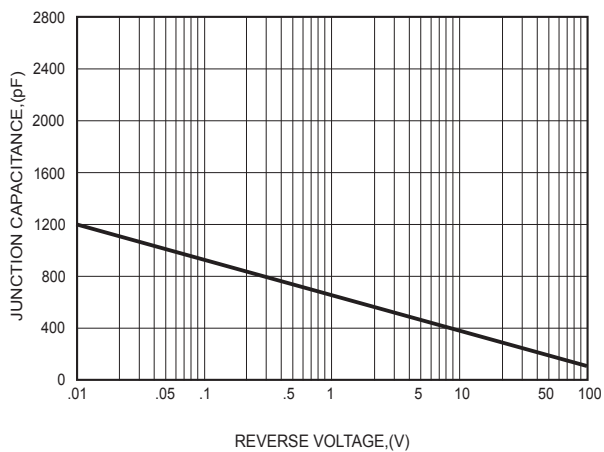


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

