

SK82 THRU SK810

8.0 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

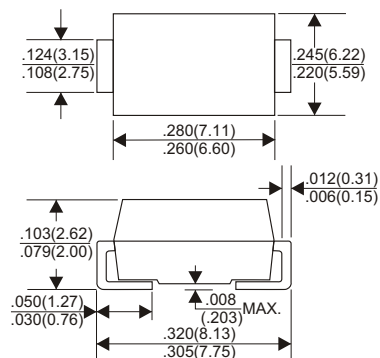
VOLTAGE RANGE

20 to 100 Volts

CURRENT

8.0 Ampere

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	SK82	SK83	SK84	SK85	SK86	SK88	SK89	SK810	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current at T _L =90 °C	8.0								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 8.0A	0.55		0.70		0.85		V		
Maximum DC Reverse Current Ta=25 °C	0.1				0.02		mA		
at Rated DC Blocking Voltage Ta=100 °C	5				2		mA		
Typical Junction Capacitance (Note1)	380								pF
Typical Thermal Resistance R _{JL} (Note 2)	10								°C/W
Operating Temperature Range T _J	-65 — +150								°C
Storage Temperature Range T _{STG}	-65 — +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 (SK82 THRU SK810)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

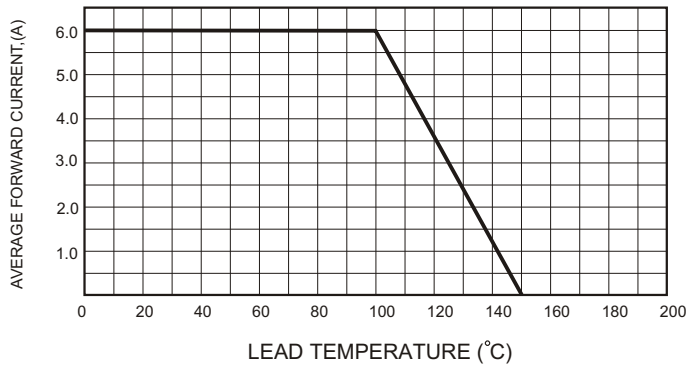


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

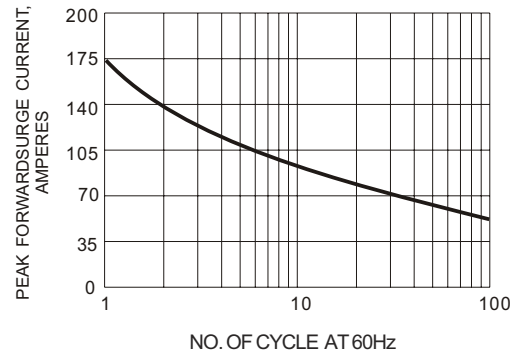


FIG.3-TYPICAL FORWARD CHARACTERISTICS

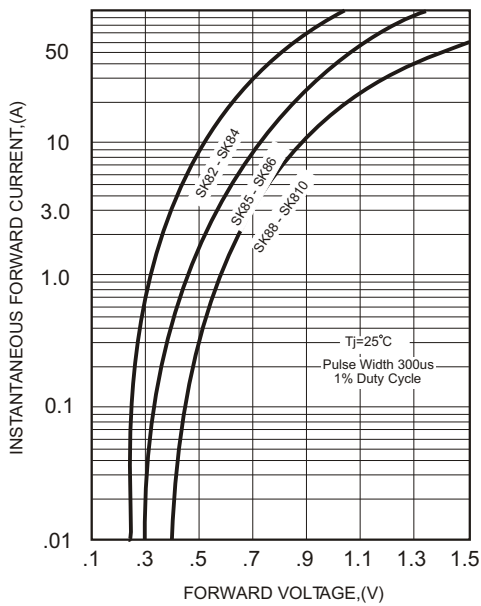


FIG.4-TYPICAL JUNCTION CAPACITANCE

