



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SK82
THRU
SK820

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER DIODE
VOLTAGE RANGE - 20 to 200 Volts CURRENT - 8.0 Amperes

FEATURES

- * Ideal for surface mounted applications
- * Low profile package
- * Built-in strain relief
- * Low leakage current
- * High surge capacity
- * Glass passivated junction

MECHANICAL DATA

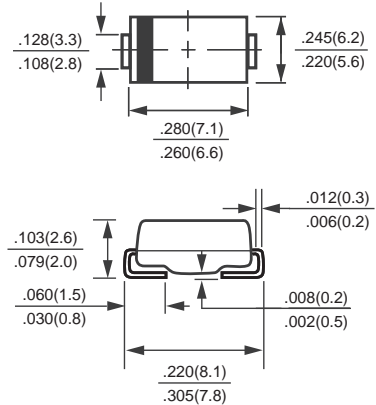
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.24 grams Approx.

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 current by 20%.



SMC(DO-214AB)



Dimensions in inches(millimeters)

	SYMBOL	SK82	SK83	SK84	SK85	SK86	SK88	SK810	SK815	SK820	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at T _C =75°C	I _O	8.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150									Amps
Maximum Instantaneous Forward Voltage at 8.0A DC	V _F	0.55			0.70		0.85		0.95		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TA = 25°C	1.0									mAmps
	@TA = 100°C	20									
Typical Junction Capacitance (Note 1)	C _J	380									pF
Typical Thermal Resistance (Note2)	R _{θJA}	55									°C/W
Storage Operating Temperature Range	T _J , T _{STG}	-55 to +125									°C

Note : 1. Measured at 1MHz and applied reverse voltage of 4.0 Volts.
 2. Mounted on PC Board with 14mm²(0.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES (SK82 THRU SK820)

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

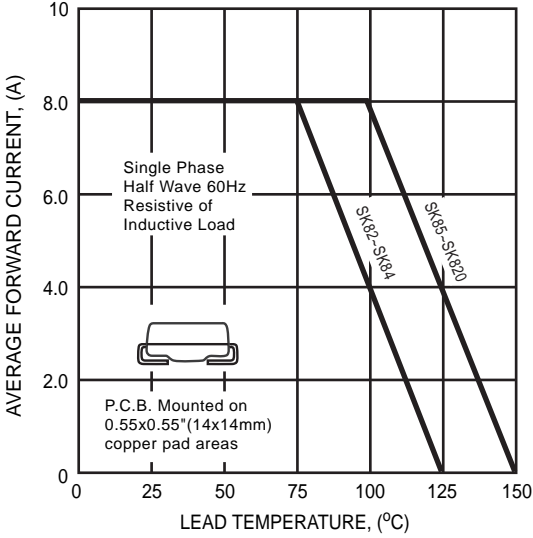


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

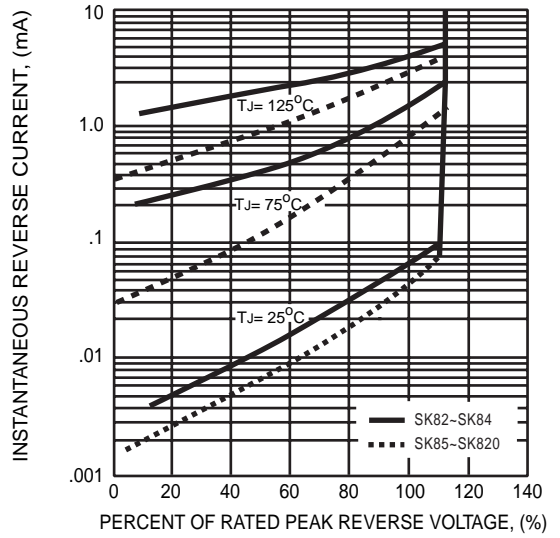


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

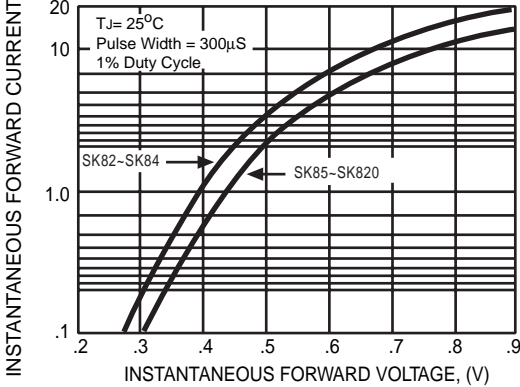


FIG.4 - TYPICAL JUNCTION CAPACITANCE

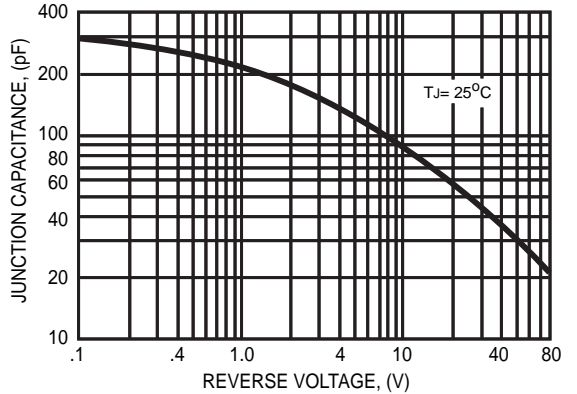


FIG.5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

