



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SK52
THRU
SK510

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER DIODE
VOLTAGE RANGE - 20 to 100 Volts CURRENT - 5.0 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

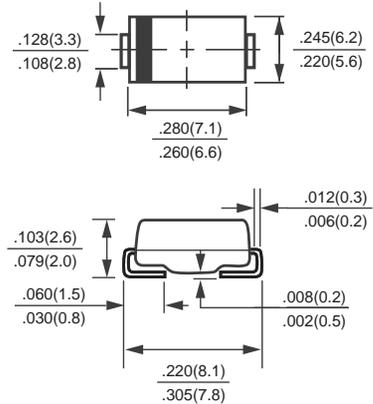
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.24 grams Approx.

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	SK52	SK53	SK54	SK55	SK56	SK58	SK510	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at T _C =75°C	I _O	5.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	100							Amps
Maximum Instantaneous Forward Voltage at 5.0A DC	V _F	0.55		0.75		0.85		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TA = 25°C	2.0							mAmps
	@TA = 100°C	20							
Typical Thermal Resistance (Note1)	R _{θJA}	55							°C/W
Storage Operating Temperature Range	T _J , T _{STG}	-55 to +125							°C

Note : 1. Mounted on PC Board with 14mm²(0.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES (SK52 THRU SK510)

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

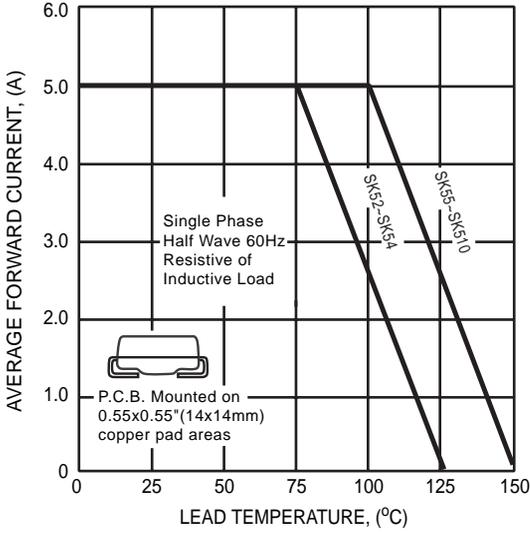


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

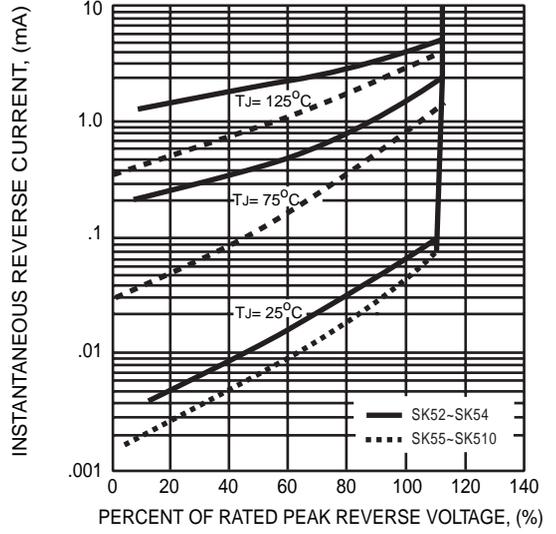


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

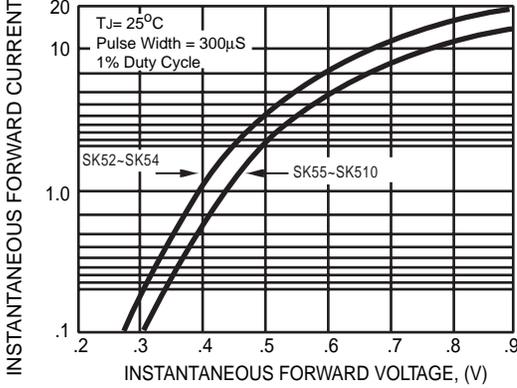


FIG.4 - TYPICAL JUNCTION CAPACITANCE

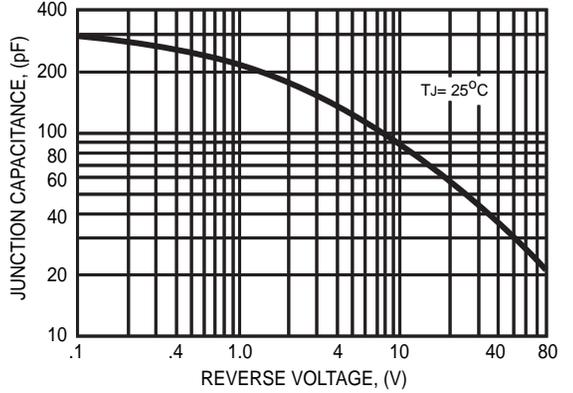
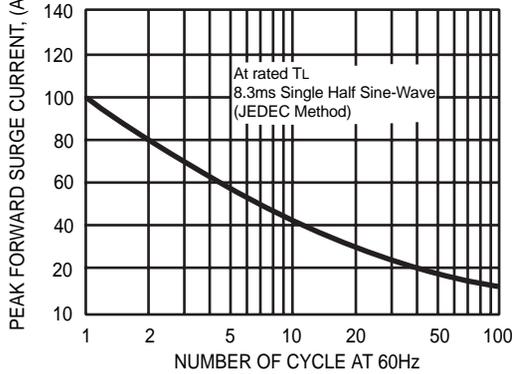


FIG.5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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