



*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**

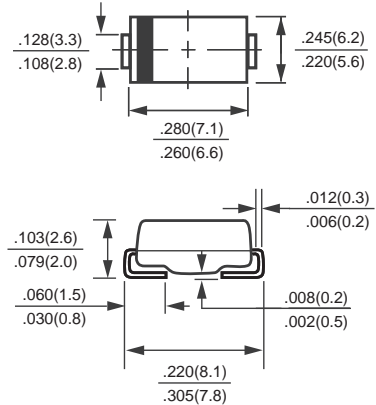
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 0.24 grams Approx.

**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 <sub>RRM</sub>	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at T <sub>C</sub> =75°C	I <sub>O</sub>	5.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	100							Amps
Maximum Instantaneous Forward Voltage at 5.0A DC	V <sub>F</sub>	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 <sub>θJA</sub>	55							°C/W
Storage Operating Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +125							°C

Note : 1. Mounted on PC Board with 14mm<sup>2</sup>(0.013mm thick) copper pad areas.

# RATING AND CHARACTERISTIC CURVES ( SK52 THRU SK510 )

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

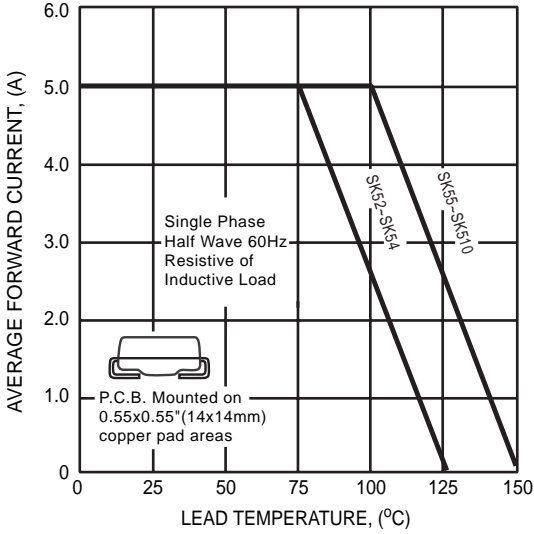


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

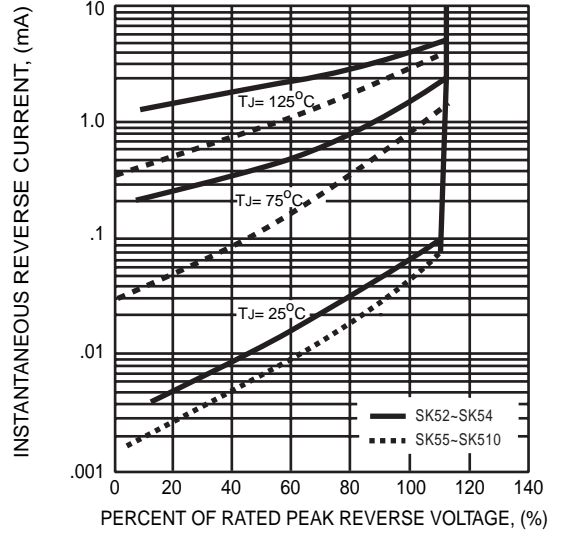


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

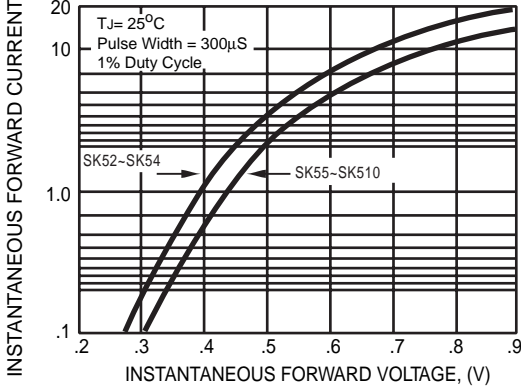


FIG.4 - TYPICAL JUNCTION CAPACITANCE

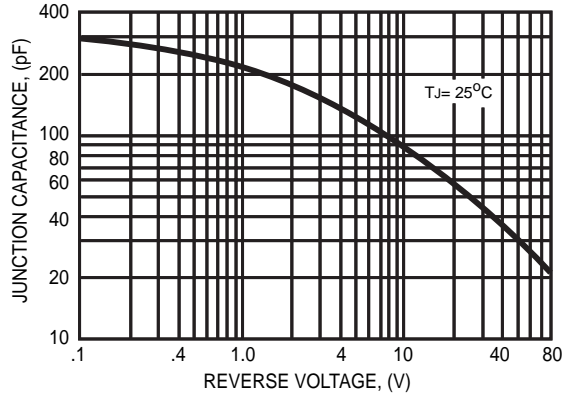
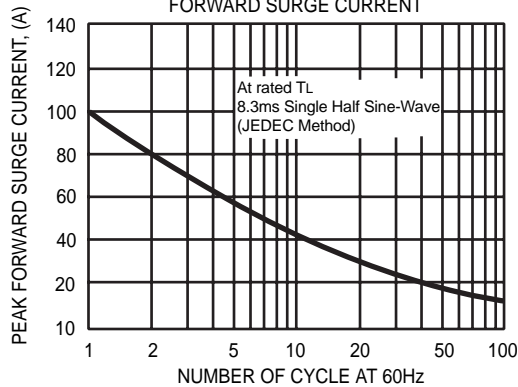


FIG.5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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