



*DC COMPONENTS CO., LTD.*

RECTIFIER SPECIALISTS

SK52  
THRU  
SK520

**TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE - 20 to 200 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**

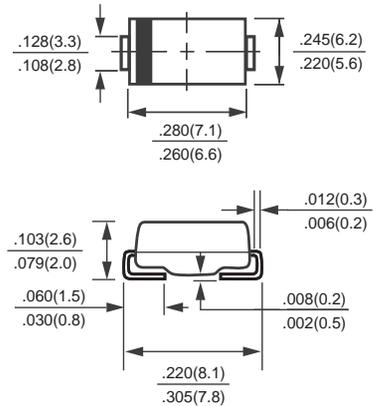
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 0.24 grams Approx.

**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	SK515	SK520	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	IO	5.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	100									Amps
Maximum Instantaneous Forward Voltage at 5.0A DC	VF	0.55			0.75		0.85		0.95		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	@ TA = 25°C									mAmps
		@ TA = 100°C									
Typical Thermal Resistance (Note 1)	RθJA	95									°C/W
Storage Operating Temperature Range	TJ, TSTG	-55 to +150									°C

- NOTES : 1. Thermal Resistance (Junction to Lead)  
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
 3. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm<sup>2</sup>) copper pad area.

# RATING AND CHARACTERISTIC CURVES ( SK52 THRU SK520 )

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

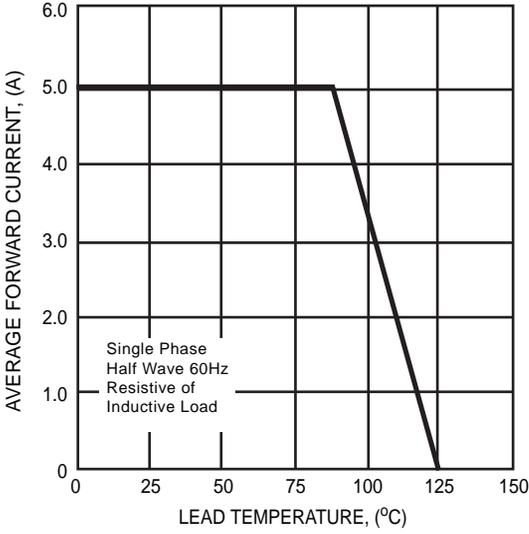


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

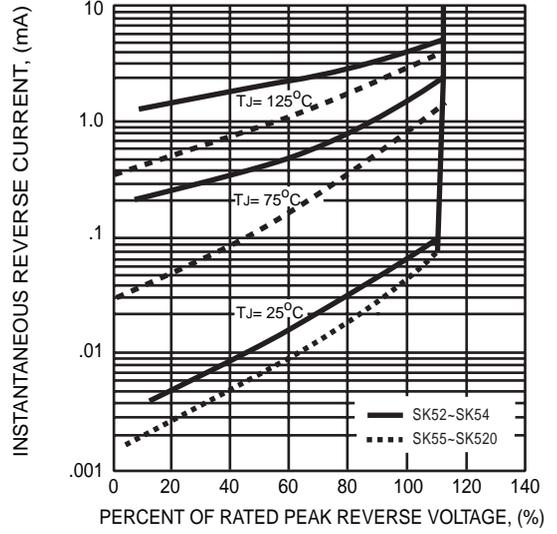


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

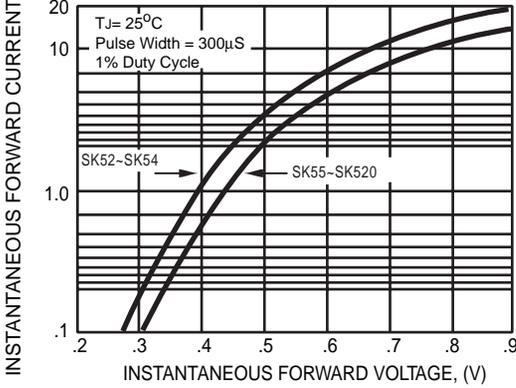


FIG.4 - TYPICAL JUNCTION CAPACITANCE

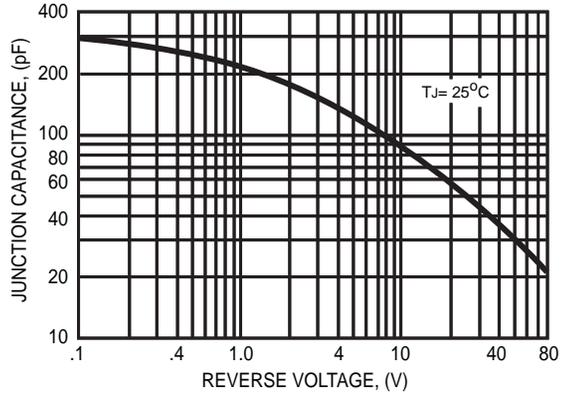
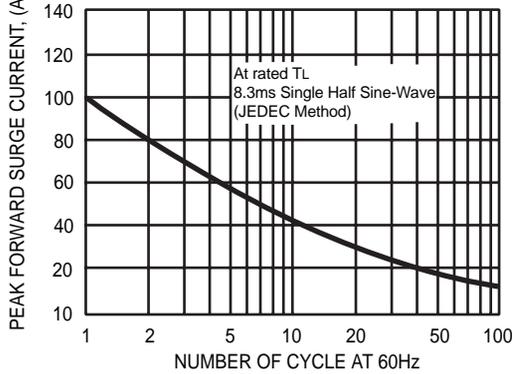


FIG.5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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