# **SMAJ5.0 THRU SMAJ440CA**

5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

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### **Features**

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

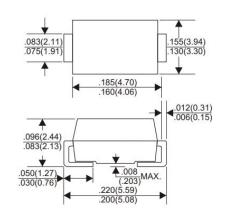
### **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.093 grams

## VOLTAGE RANGE 20 to 100 Volts CURRENT

5.0 Ampere

#### DO-214AA(SMB)



Dimensions in inches and (millimeters)

### **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating 25 C ambient temperature unless otherwies specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

TYPE NUMBER		SK52	SK53	SK54	SK55	SK56	SK58	SK59	SK510	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 C	Current									
at TL=90 C			5.0							
Peak Forward Surge Current, 8.3 ms s	ingle half sine-wave									
superimposed on rated load (JEDEC method)			120							
Maximum Instantaneous Forward Voltage at 5.0A			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							
Typical Thermal Resistance R JL (Note 2)			16							
Operating Temperature Range T <sub>J</sub>			-65 — <del>+</del> 150							
Storage Temperature Range TsTG			-65 <u></u> +150							

#### NOTES

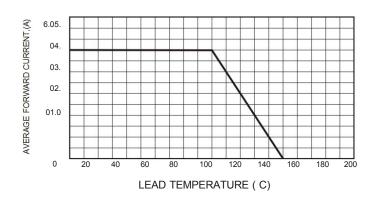
- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Thermal Resistance Junction to Lead.

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### RATING AND CHARACTERISTIC CURVES (SK52 THRU SK510)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE



# FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

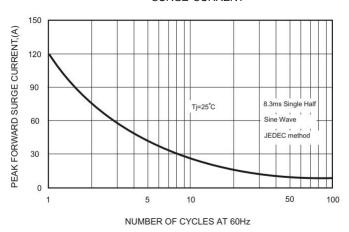


FIG.4-TYPICAL JUNCTION CAPACITANCE

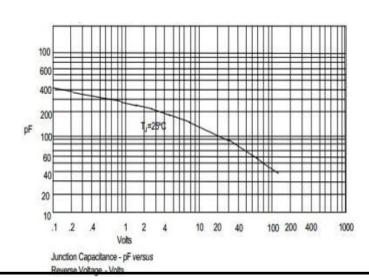


FIG.2-TYPICAL FORWARD

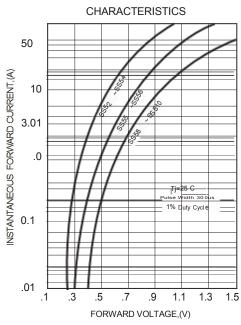


FIG.5 - TYPICAL REVERSE

