

**SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE 20 to 60 Volts CURRENT 30 Amperes**

**FEATURES**

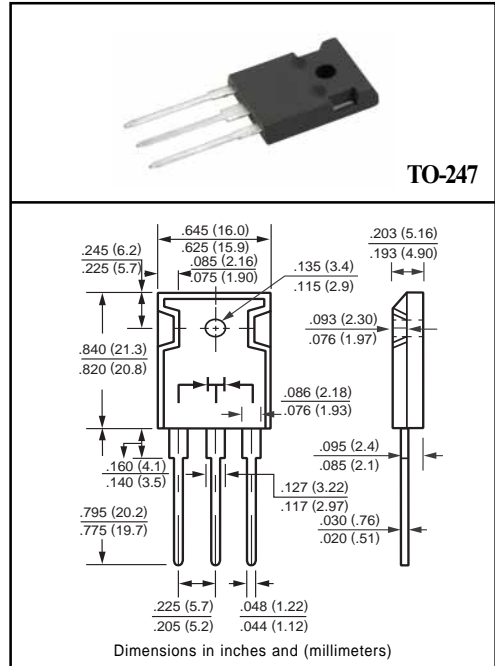
- \* Low switching noise
- \* Low forward voltage drop
- \* Low thermal resistance
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

- \* Case: To-247 molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 5.60 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	SR3020C	SR3030C	SR3035C	SR3040C	SR3045C	SR3050C	SR3060C	UNITS	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	35	40	45	50	60	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	25	28	32	35	42	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	35	40	45	50	60	Volts	
Maximum Average Forward Rectified Current at Derating Case Temperature	I <sub>O</sub>	30.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	300							Amps	
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	1.4							°C/W	
Operating Temperature Range	T <sub>J</sub>	-65 to + 125					-65 to + 150			°C
Storage Temperature Range	T <sub>STG</sub>	-65 to + 150							°C	

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	SR3020C	SR3030C	SR3035C	SR3040C	SR3045C	SR3050C	SR3060C	UNITS	
Maximum Instantaneous Forward Voltage at 15.0A DC	V <sub>F</sub>	.65							.75	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	@ T <sub>C</sub> = 25°C 10					@ T <sub>C</sub> = 100°C 100			mAmps mAmps

NOTES : 1. Thermal Resistance Junction to Case.  
 2. Suffix "A" = Common Anode.

# RATING AND CHARACTERISTIC CURVES ( SR3020C THRU SR3060C )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

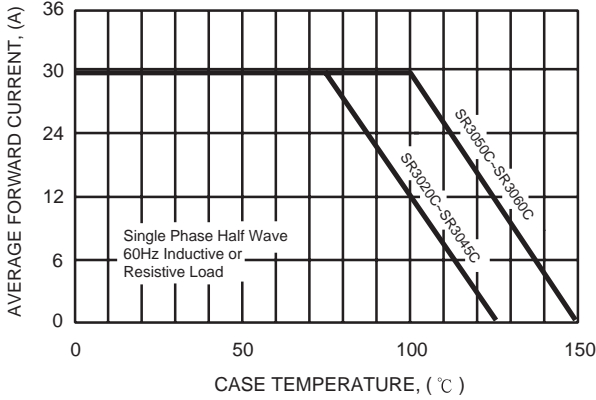


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

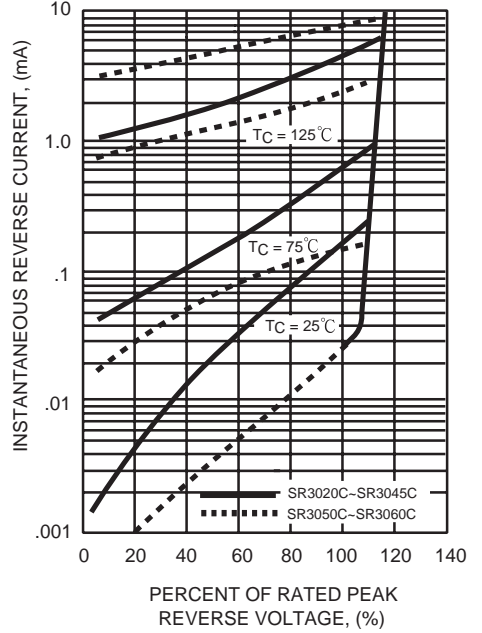


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

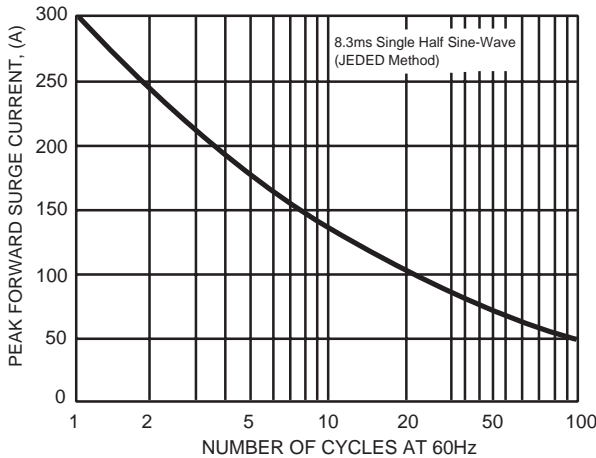


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

