

**SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE 20 to 50 Volts CURRENT 60 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**

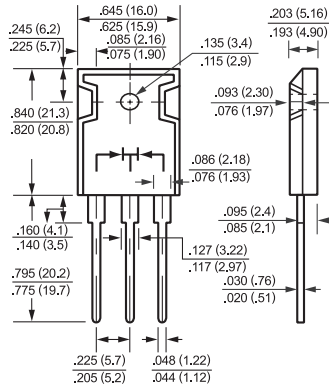
- \* Case: To-247 molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 5.1 grams

**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%.



**TO-247**



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	SR6020C	SR6030C	SR6035C	SR6040C	SR6045C	SR6050C	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	35	40	45	50	Volts
Maximum RMS Voltage	VRMS	14	21	25	28	32	35	Volts
Maximum DC Blocking Voltage	VDC	20	30	35	40	45	50	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	IO	60						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	600						Amps
Typical Thermal Resistance (Note 1)	R θ J C	0.8						°C/W
Operating Temperature Range	TJ	-65 to + 125					-65 to + 150	°C
Storage Temperature Range	TSTG	-65 to + 150						°C

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

CHARACTERISTICS	SYMBOL	SR6020C	SR6030C	SR6035C	SR6040C	SR6045C	SR6050C	UNITS	
Maximum Instantaneous Forward Voltage at 25.0A DC	VF	.65						.75	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	IR	@ Tc = 25°C						10	mAmps
		@ Tc = 100°C						100	mAmps

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

# RATING AND CHARACTERISTIC CURVES ( SR6020C THRU SR6050C )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

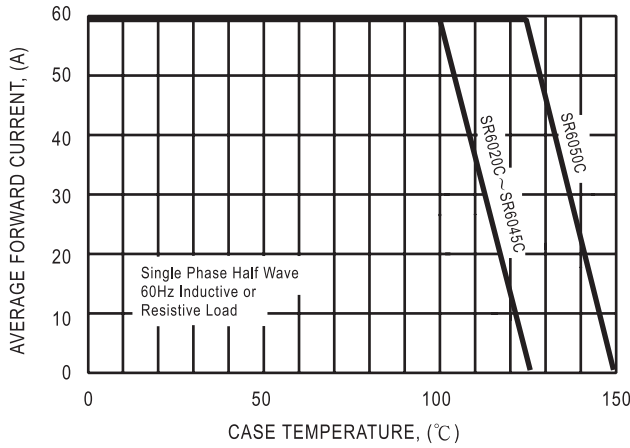


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

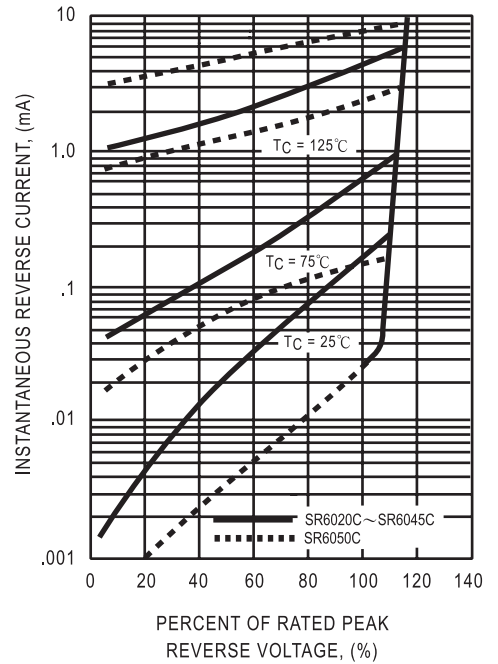


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

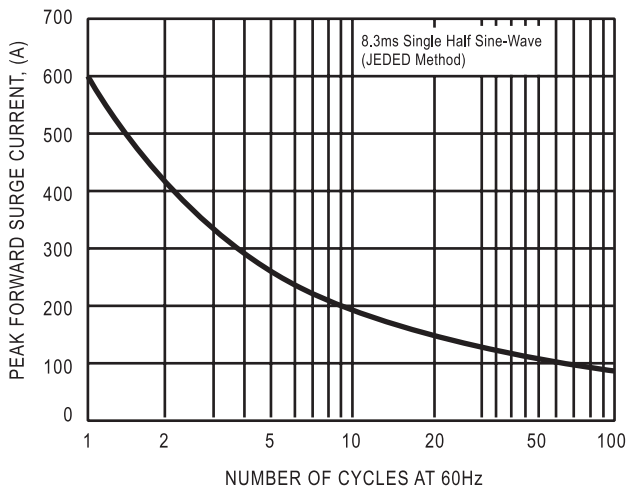


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

