

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 60 Volts CURRENT 30 Amperes

FEATURES

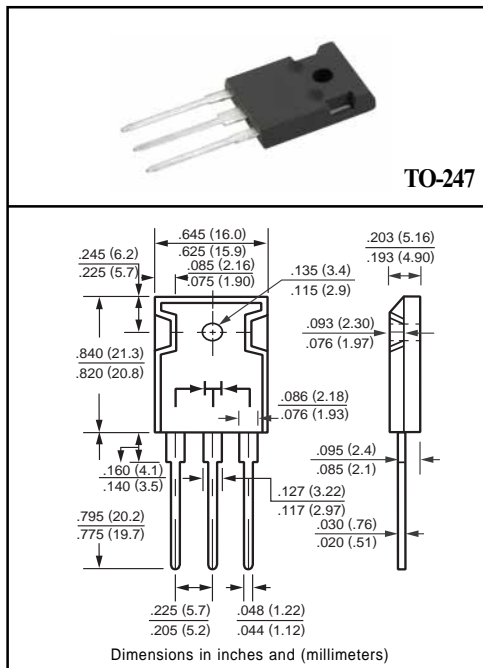
- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High switching capability
- * High surge capability
- * High reliability

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	VRRM	20	30	35	40	45	50	60	Volts
Maximum RMS Voltage	VRMS	14	21	25	28	32	35	42	Volts
Maximum DC Blocking Voltage	VDC	20	30	35	40	45	50	60	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	IO	30.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	300							Amps
Typical Thermal Resistance (Note 1)	RθJC	1.4							°C/W
Operating Temperature Range	TJ	-55 to + 150							°C
Storage Temperature Range	TSTG	-55 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	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 (SR3020C THRU SR3060C)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

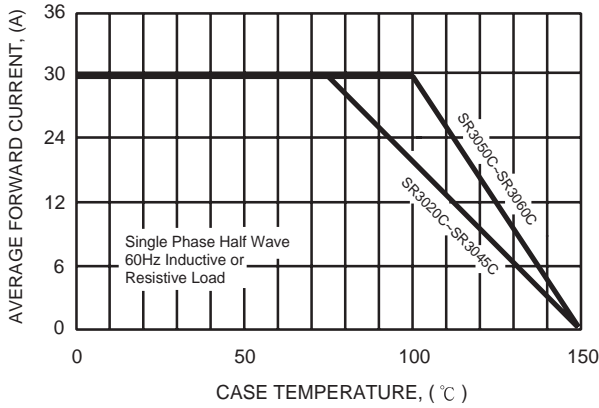


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

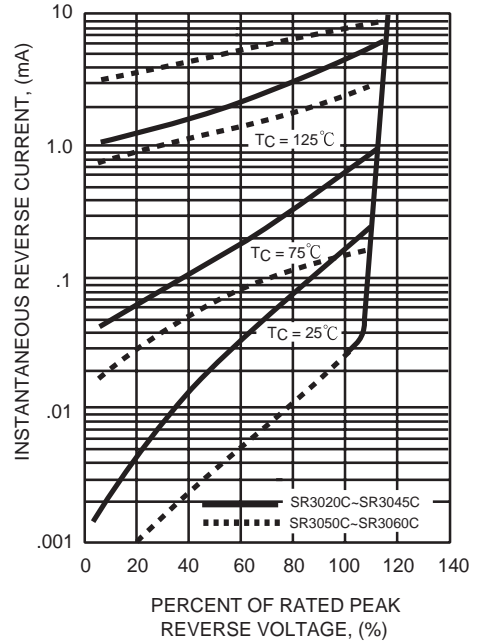


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

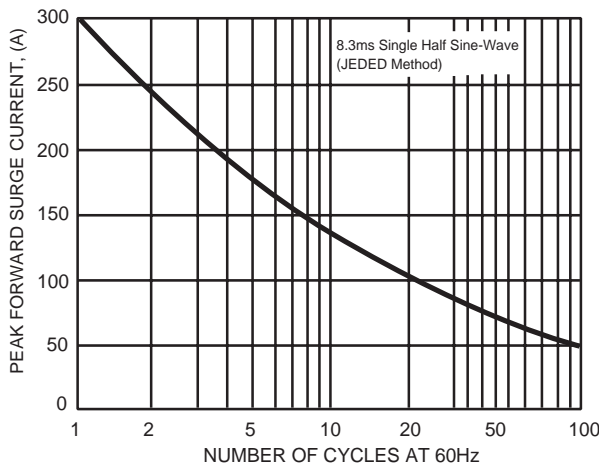


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

