

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

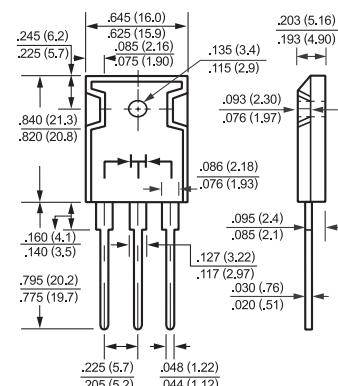
- * Case: To-247 molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 5.1 grams

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	V _{RRM}	20	30	35	40	45	50	Volts
Maximum RMS Voltage	V _{RMS}	14	21	25	28	32	35	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	35	40	45	50	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I _O	60						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	600						Amps
Typical Thermal Resistance (Note 1)	R _{θJC}	0.8						°C/W
Operating Temperature Range	T _J	-65 to + 125				-65 to + 150		°C
Storage Temperature Range	T _{STG}	-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			10				mAmps
						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

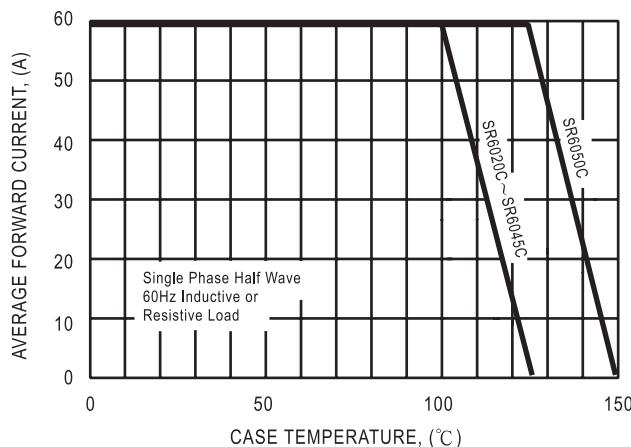


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

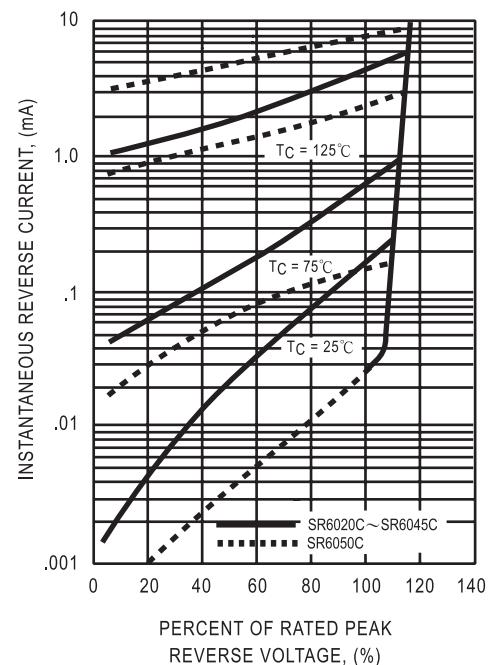


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

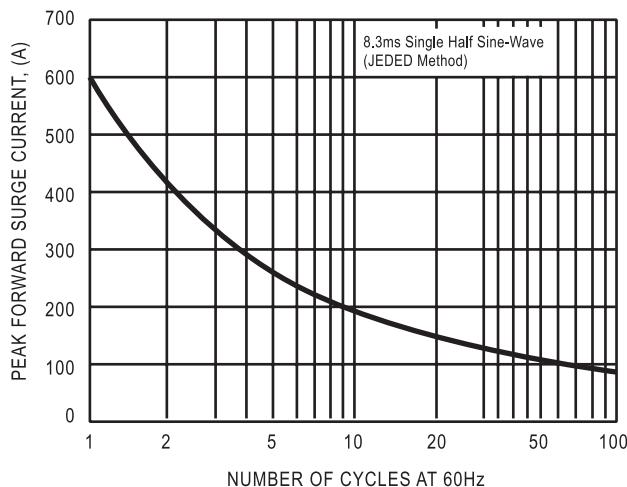


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

