

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 60 Volts CURRENT 20 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

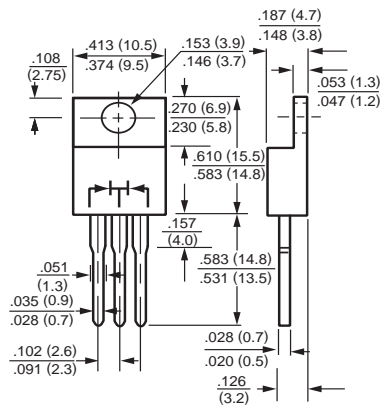
- * Case: To-220 molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 2.24 grams

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-220



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	SR2020C	SR2030C	SR2035C	SR2040C	SR2045C	SR2050C	SR2060C	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	20							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150							Amps
Typical Thermal Resistance (Note 1)	RθJC	3							°C/W
Typical Junction Capacitance (Note 3)	CJ	700					500		pF
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	SR2020C	SR2030C	SR2035C	SR2040C	SR2045C	SR2050C	SR2060C	UNITS
Maximum Instantaneous Forward Voltage at 10.0A DC		V _F	.65						.75	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T _C = 25°C	I _R	10							mAmps
	@T _C = 100°C		100							mAmps

NOTES : 1. Thermal Resistance Junction to Case.
2. Suffix "A" = Common Anode.
3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (SR2020C THRU SR2060C)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

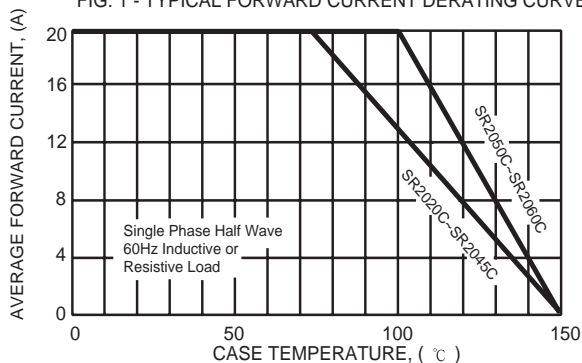


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

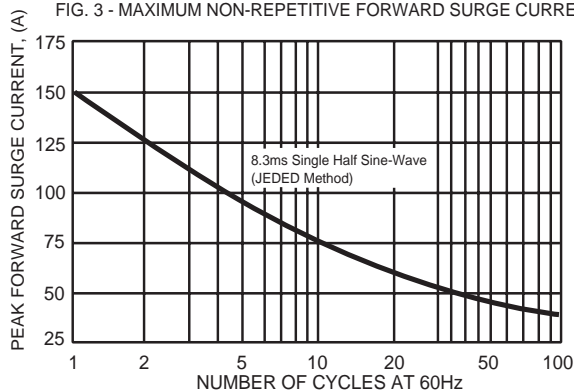


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

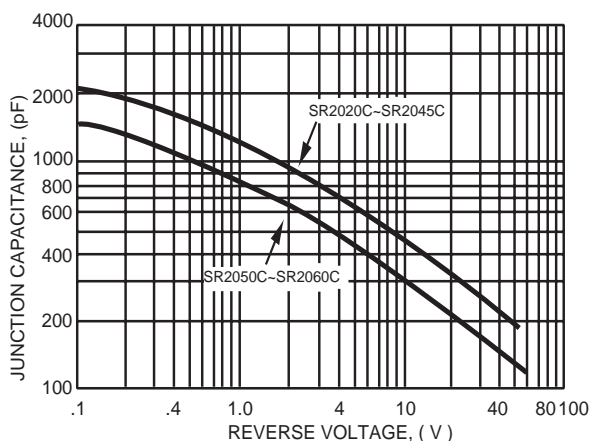


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

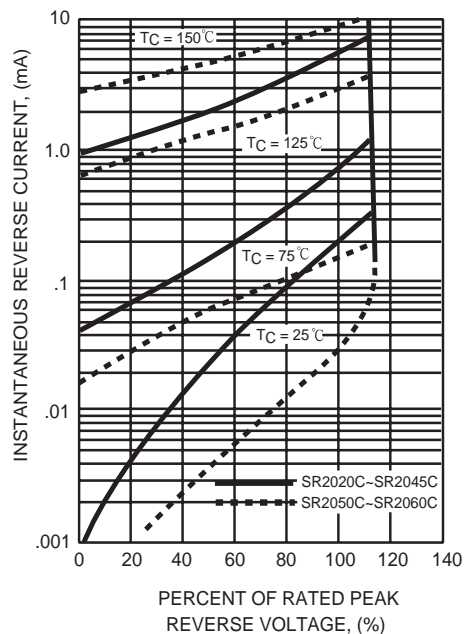


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

