

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 200 Volts CURRENT 30 Amperes

FEATURES

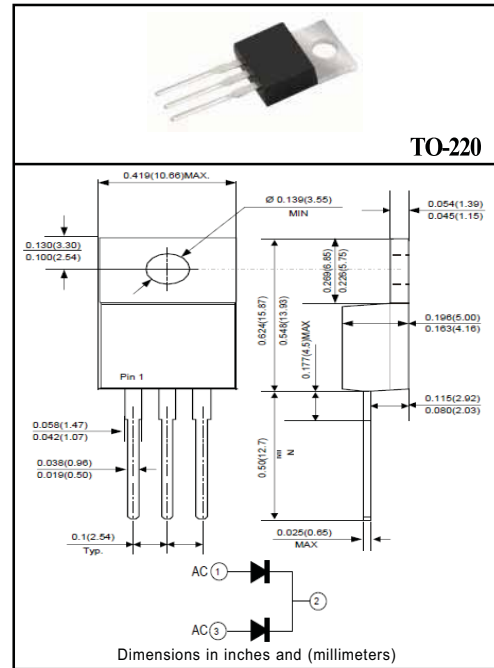
- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High switching capability
- * High surge capability
- * High reliability

MECHANICAL DATA

- * Case: To-220 molded plastic
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.



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

RATINGS	SYMBOL	SR3020C	SR3030C	SR3035C	SR3040C	SR3045C	SR3050C	SR3060C	SR3080C	SR30100C	SR30150C	SR30200C	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	35	40	45	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	25	28	32	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	35	40	45	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I_O	30											Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300											Amps
Typical Current Squared Time	I^2t	373.3											A ² /Sec
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.5											°C/W
	$R_{\theta JA}$	30											
Operating Temperature Range	T_J	150											°C
Storage Temperature Range	T_{STG}	-55 to + 150											°C

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

CHARACTERISTICS	SYMBOL	SR3020C	SR3030C	SR3035C	SR3040C	SR3045C	SR3050C	SR3060C	SR3080C	SR30100C	SR30150C	SR30200C	UNITS
Maximum Instantaneous Forward Voltage at 15.0A DC	V_F	.65					.75		.80				Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	I_R	@ $T_A = 25^\circ C$											mA
		@ $T_A = 100^\circ C$											10

- NOTES : 1. Thermal Resistance : Heat-sink mounted.
2. Suffix "A" = Common Anode.
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTICS CURVES (SR3020C THRU SR30200C)

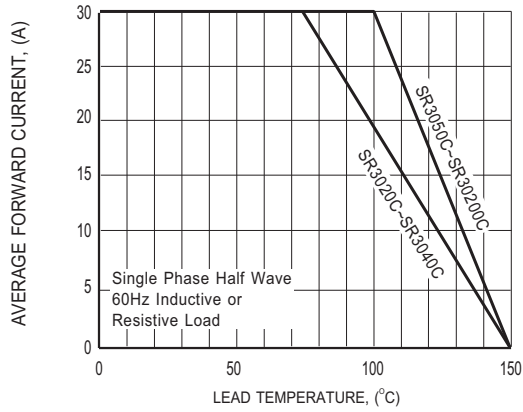


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

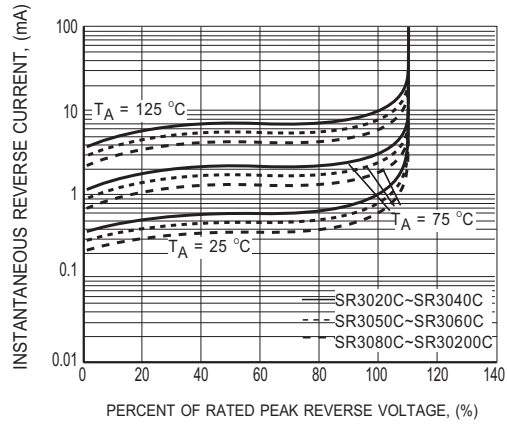


FIG.2 TYPICAL REVERSE CHARACTERISTICS

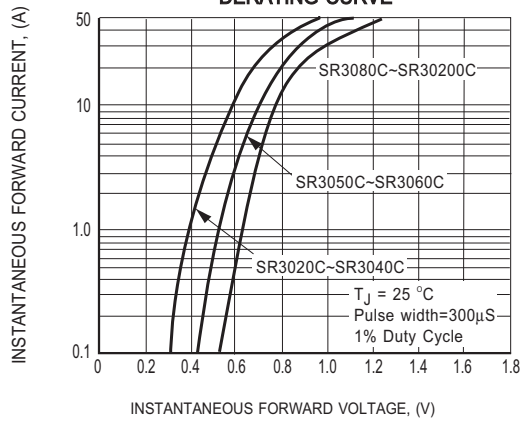


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

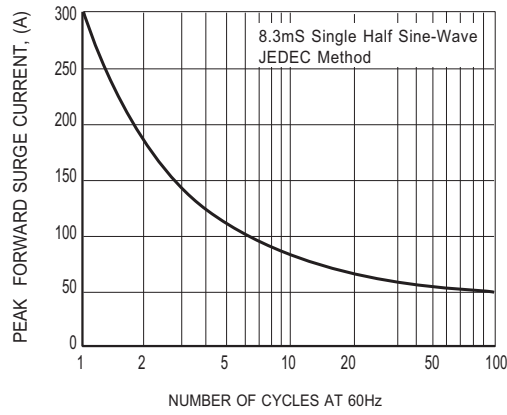


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

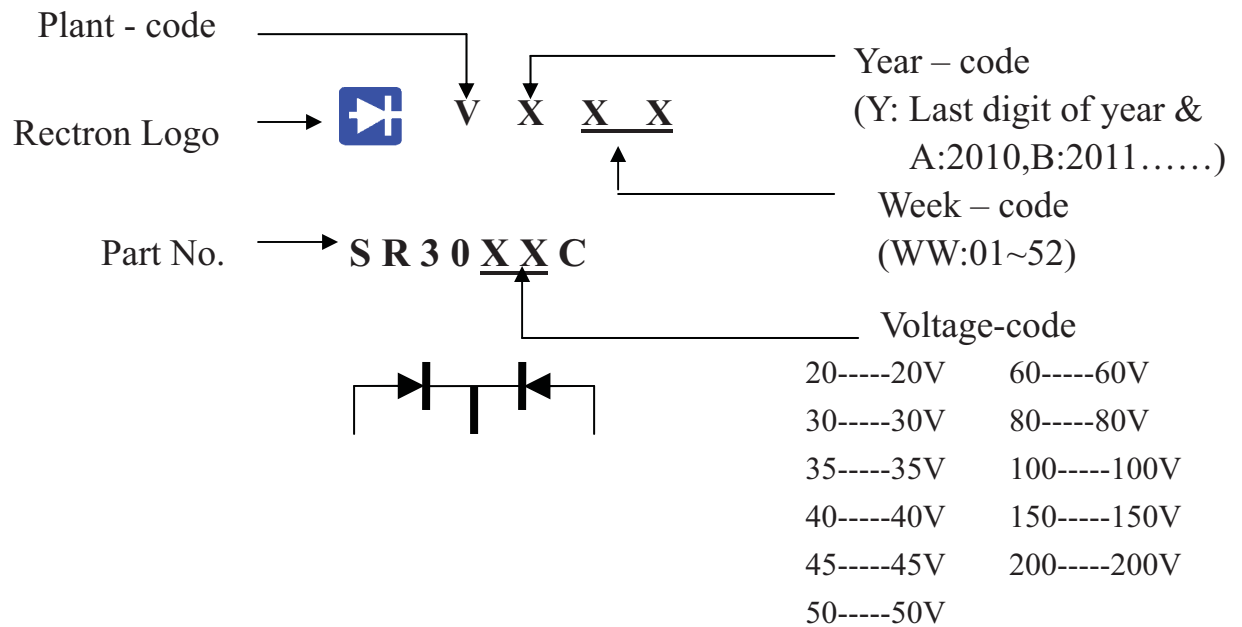


Attachment information about SR30XXC

1. Internal Circuit



2. Marking on the body



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
(I)TO-220/TO-220(A)	-C	2,000	550*140*92	572*308*120	4,000	11.80