

SCHOTTKY BARRIER RECTIFIER

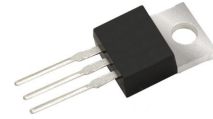
VOLTAGE RANGE 20 to 200 Volts CURRENT 10.0 Ampere

FEATURES

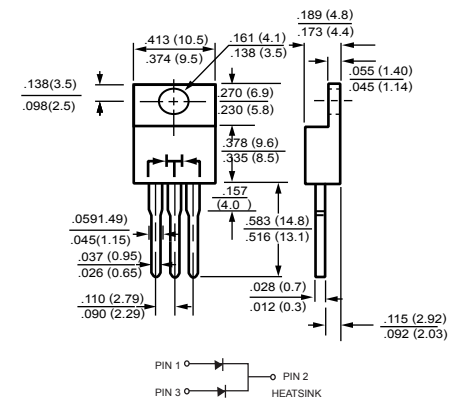
- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High switching capability
- * High surge capability
- * High reliability

MECHANICAL DATA

- * Case: T o-220 m olded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any



TO-220



Dimensions in inches and (millimeters)

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 (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	SR1020C	SR1030C	SR1035C	SR1040C	SR1045C	SR1050C	SR1060C	SR1080C	SR10100C	SR10150C	SR10200C	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	10.0											Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150											Amps	
Typical Current Squared Time	I^2t	93.37											A ² /Sec	
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	3.0											°C/W	
	$R_{\theta JA}$	60												
Typical Junction Capacitance (Note 3)	C_J	700					450							pF
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	SR1020C	SR1030C	SR1035C	SR1040C	SR1045C	SR1050C	SR1060C	SR1080C	SR10100C	SR10150C	SR10200C	UNITS	
Maximum Instantaneous Forward Voltage at 5.0A DC	V_F	.65					.75			.85				Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	I_R	@ $T_A = 25^\circ C$											mA	
		@ $T_A = 100^\circ C$											2	mA

- NOTES : 1. Thermal Resistance : Heat-sink mounted.
2. Suffix "A" = Common Anode.
3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
4. "RoHS compliant".

RATING AND CHARACTERISTICS CURVES (SR1020C THRU SR10200C)

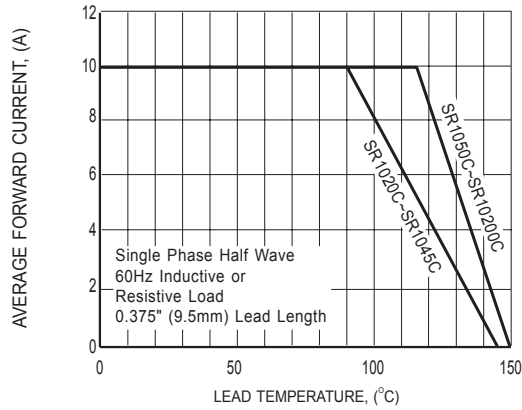


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

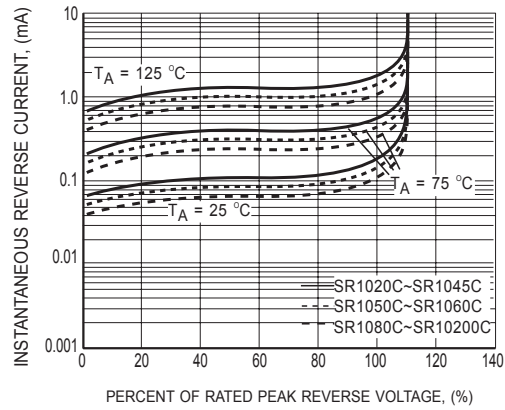


FIG.2 TYPICAL REVERSE CHARACTERISTICS

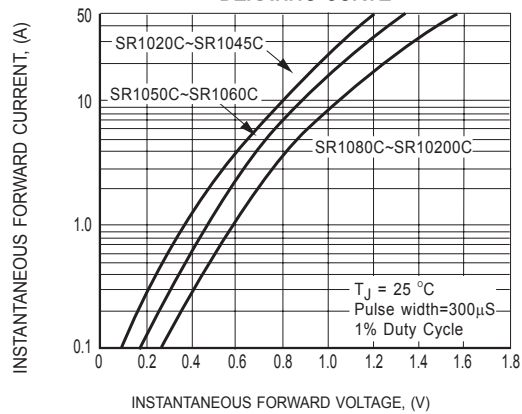


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

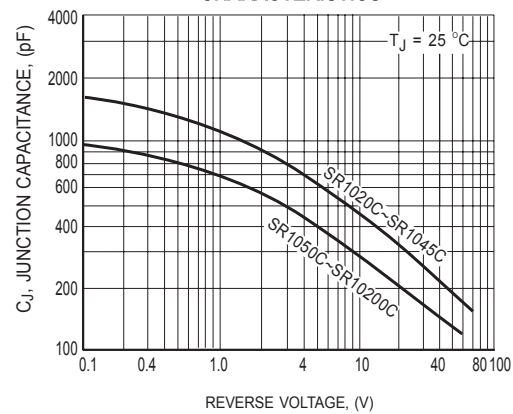


FIG.4 TYPICAL JUNCTION CAPACITANCE

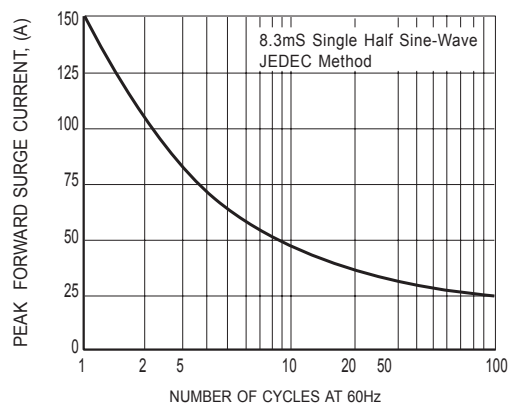


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

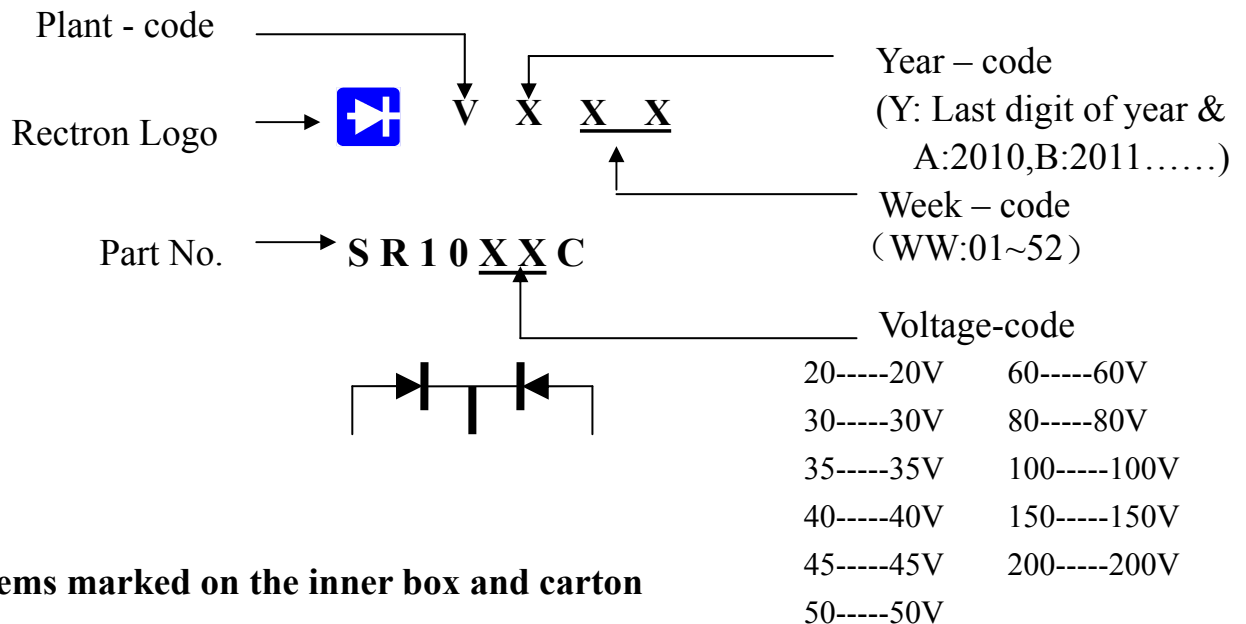


Attachment information about SR10XXC

1. Internal Circuit



2. Marking on the body



3. Items marked on the inner box and carton

3.1 On the box (for -C)

CUSTOMER
TYPE
LOT NO.
QUANTITY
Q.A.
DATE

3.2 On the carton

CUSTOMER
TYPE
QUANTITY
LOT NO.
REMARK

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)
TO-220	-C	2,000	550*140*92	572*308*120	4,000	11.80

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