RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

SR7080C THRU SR70200C

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 80 to 200 Volts CURRENT 70 Amperes

FEATURES

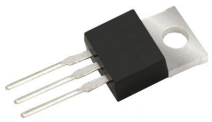
* Low switching noise
* Low forward voltage drop
* Low thermal resistance
* High current capability
* High switching capability
* High surge capabitity
* High reliability

MECHANICAL DATA

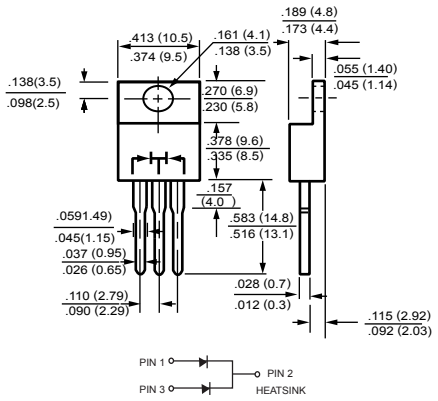
* Case: To-220 molded plastic
* Epoxy: Device has UL flammability classification 94V-O
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any

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 (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	SR7080C	SR70100C	SR70150C	SR70200C	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Ambient Temperature	I_O	70				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	450				Amps
Typical Current Squarad Time	I^2t	840				A^2/Sec
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.2				°C/W
	$R_{\theta JA}$	24				
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	SR7080C	SR70100C	SR70150C	SR70200C	UNITS
Maximum Instantaneous Forward Voltage at 35.0A DC		V_F	.85				Volts
Maximum Average Reverse Current	@T_A = 25°C	I_R	1.0				mA
at Rated DC Blocking Voltage	@T_A = 100°C		10				mA

NOTES : 1. Thermal Resistance : Heat-sink mounted.
2. Suffix "A" = Common Anode.
3."RoHS compliant"

2022-04
REV:C

RATING AND CHARACTERISTICS CURVES (SR7080C THRU SR70200C)

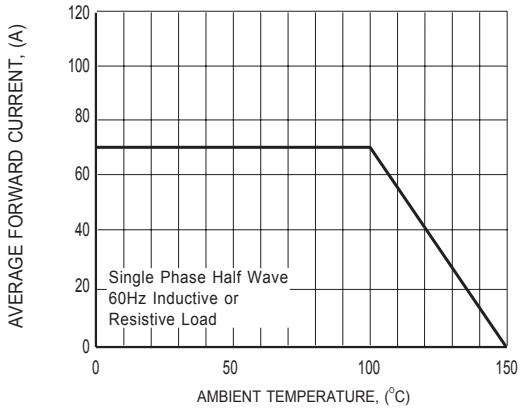


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

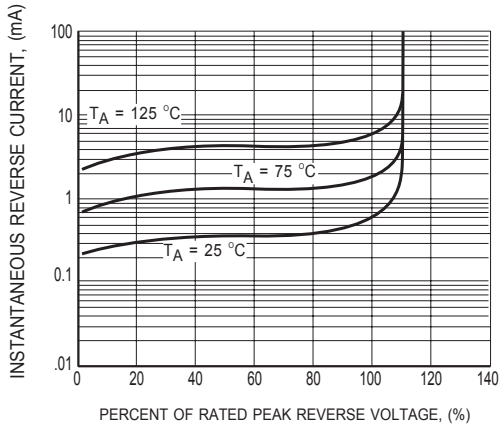


FIG.2 TYPICAL REVERSE CHARACTERISTICS

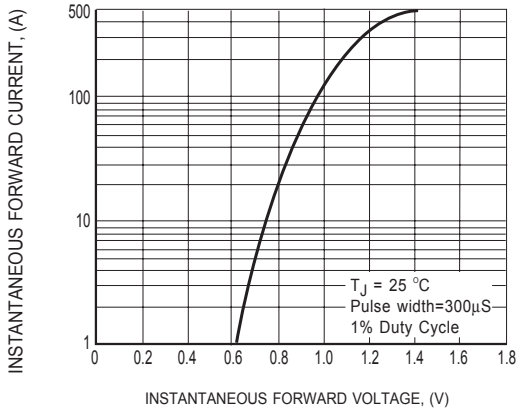


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

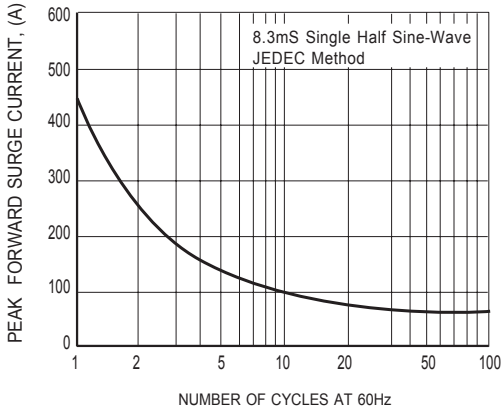
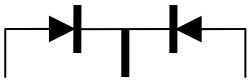


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

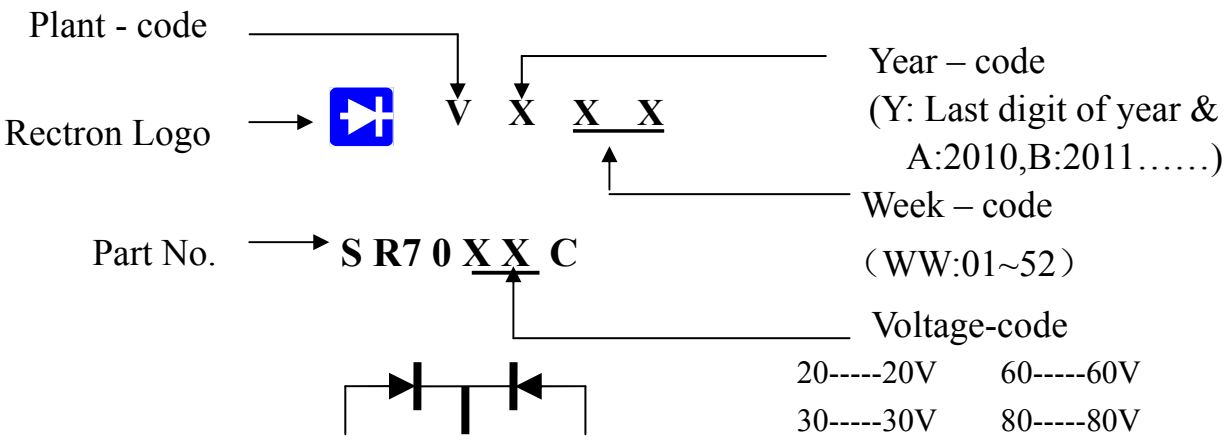
RECTRON

Attachment information about SR70XXC

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	1,000	555*150*40	580*230*175	5,000	15.0

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