

**SCHOTTKY BARRIER RECTIFIER**  
**VOLTAGE RANGE 100 Volts CURRENT 20.0 Ampere**

**FEATURES**

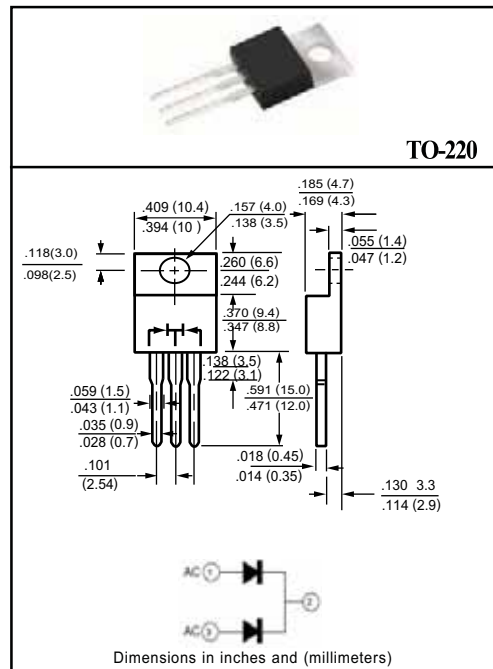
- \* Low switching noise
- \* Low forward voltage drop
- \* Low thermal resistance
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

- \* Case: 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.  
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	SR20H100C	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	Volts
Maximum RMS Voltage	$V_{RMS}$	70	Volts
Maximum DC Blocking Voltage	$V_{DC}$	100	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	$I_O$	20.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150	Amps
Typical Current Square Time	$I^2T$	93	A <sup>2</sup> S
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.0	°C/W
	$R_{\theta JA}$	40	
Typical Junction Capacitance (Note 3)	$C_J$	500	pF
Operating Temperature Range	$T_J$	-55 to + 175	°C
Storage Temperature Range	$T_{STG}$	-55 to + 175	°C

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

CHARACTERISTICS	SYMBOL	SR20H100C	UNITS
Maximum Instantaneous Forward Voltage at 10.0A DC	$V_F$	.88	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	5.0	uA
	@ $T_A = 150^\circ\text{C}$	5.0	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 (SR20H100C)

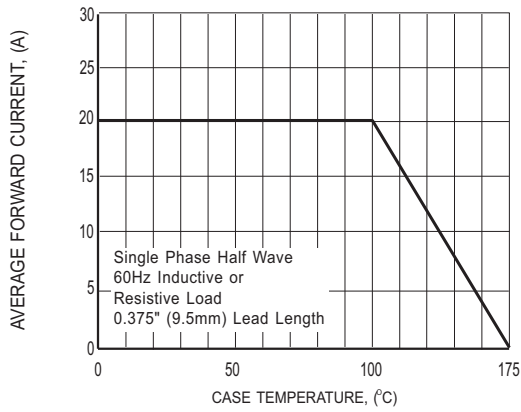


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

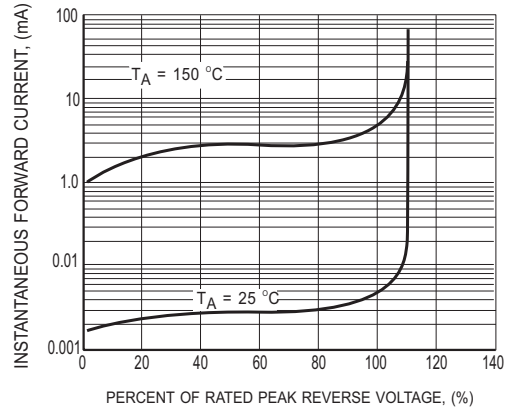


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

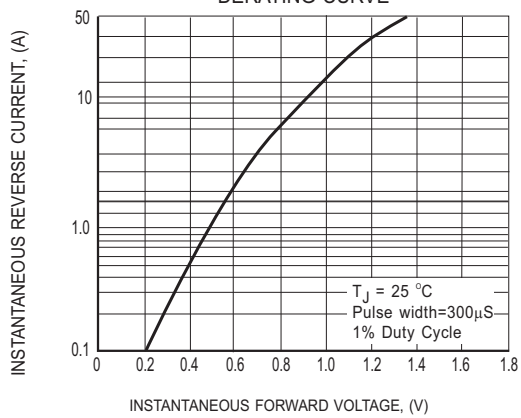


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

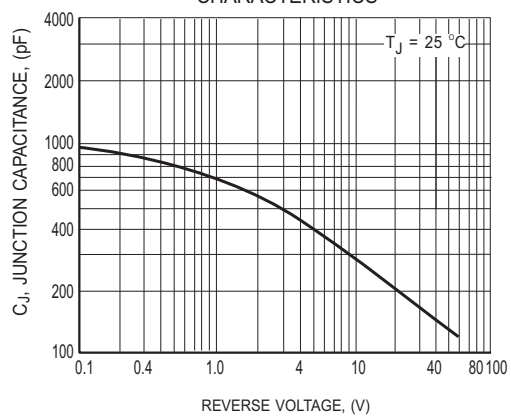


FIG.4 TYPICAL JUNCTION CAPACITANCE

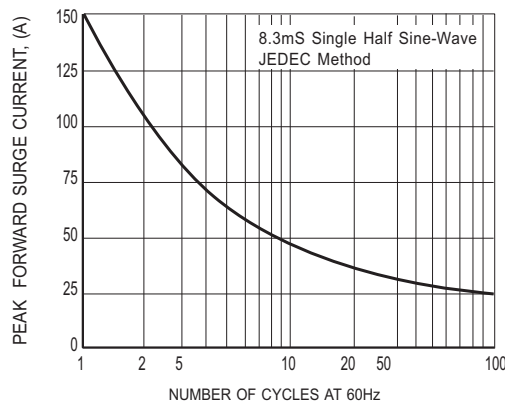
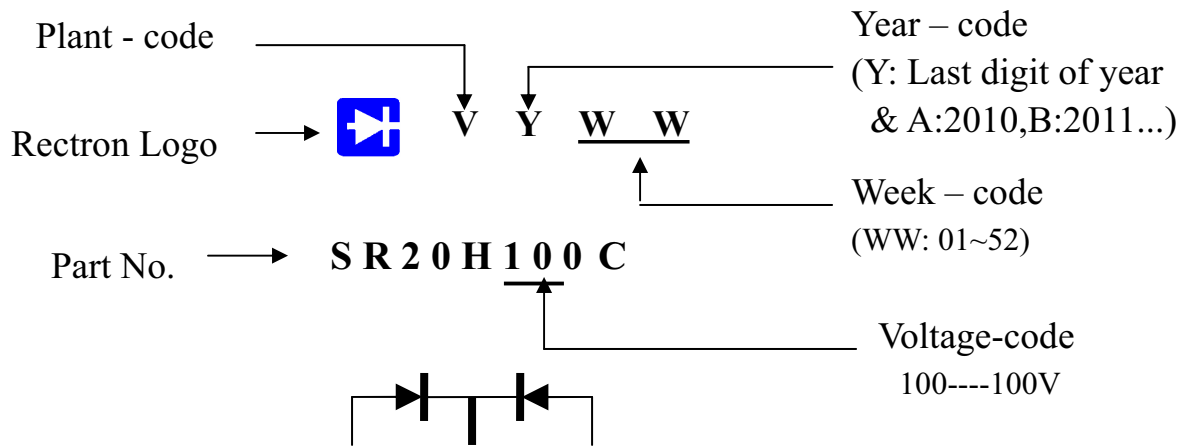


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

## Marking Description



# 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

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