

**SCHOTTKY BARRIER RECTIFIER**

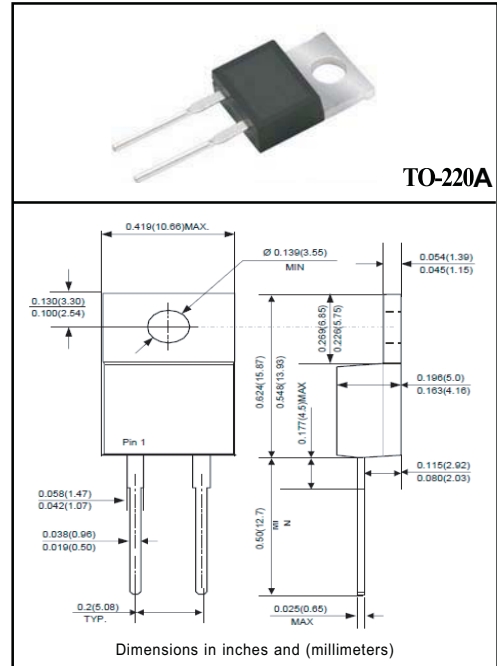
**VOLTAGE RANGE 20 To 200 Volts CURRENT 10.0 Ampere**

**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-220A 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%.

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

RATINGS	SYMBOL	SR1020	SR1040	SR1060	SR10100	SR10150	SR10200	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	40	60	100	150	200	Volts
Maximum RMS Voltage	$V_{RMS}$	14	28	42	70	105	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	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 Thermal Resistance (Note 1)	$R_{\theta JC}$	3.0						°C/W
	$R_{\theta JA}$	60						
Typical Junction Capacitance (Note 3)	$C_J$	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	SR1020	SR1040	SR1060	SR10100	SR10150	SR10200	UNITS
Maximum Instantaneous Forward Voltage at 100A DC	$V_F$	.65		.70	.85		.92	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	$I_R$	@ $T_A = 25^\circ C$ 0.05			0.01			mA
		@ $T_A = 125^\circ C$ 50						mA

- NOTES : 1. Thermal Resistance : Heat-sink mounted.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

## RATING AND CHARACTERISTICS CURVES ( SR1020 THRU SR10200 )

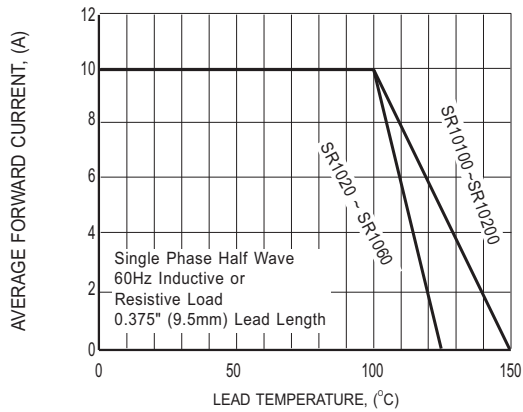


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

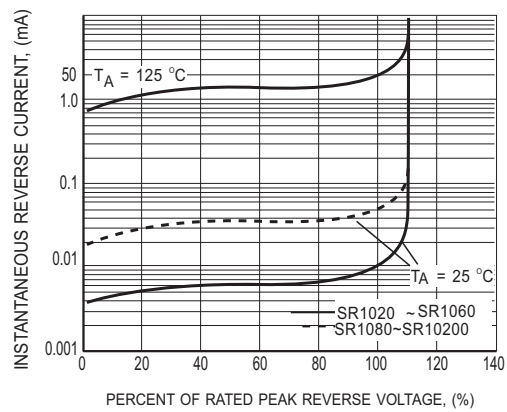


FIG.2 TYPICAL REVERSE CHARACTERISTICS

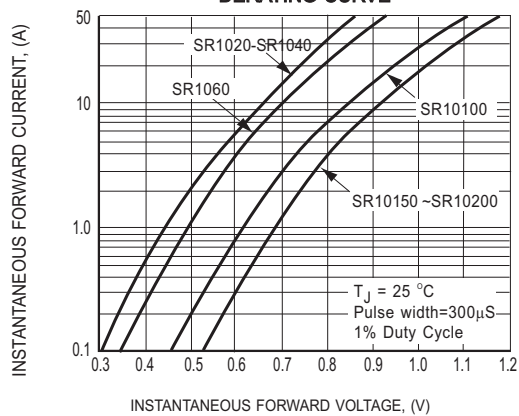


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

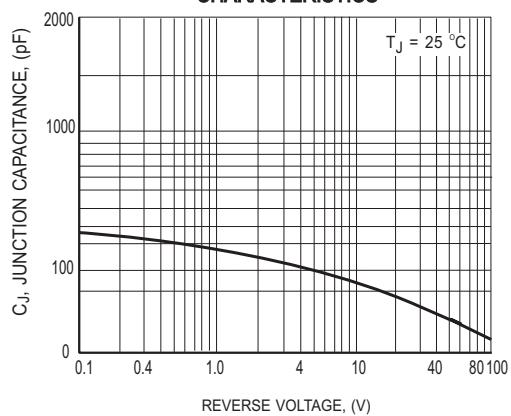


FIG.4 TYPICAL JUNCTION CAPACITANCE

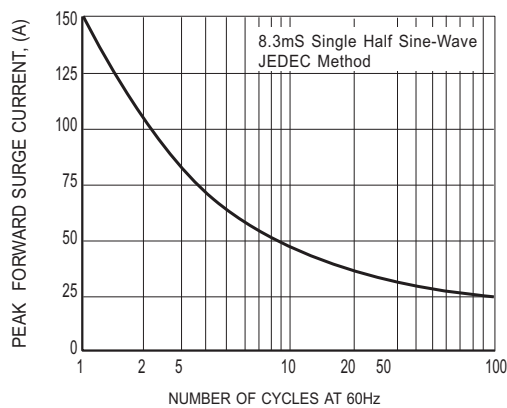
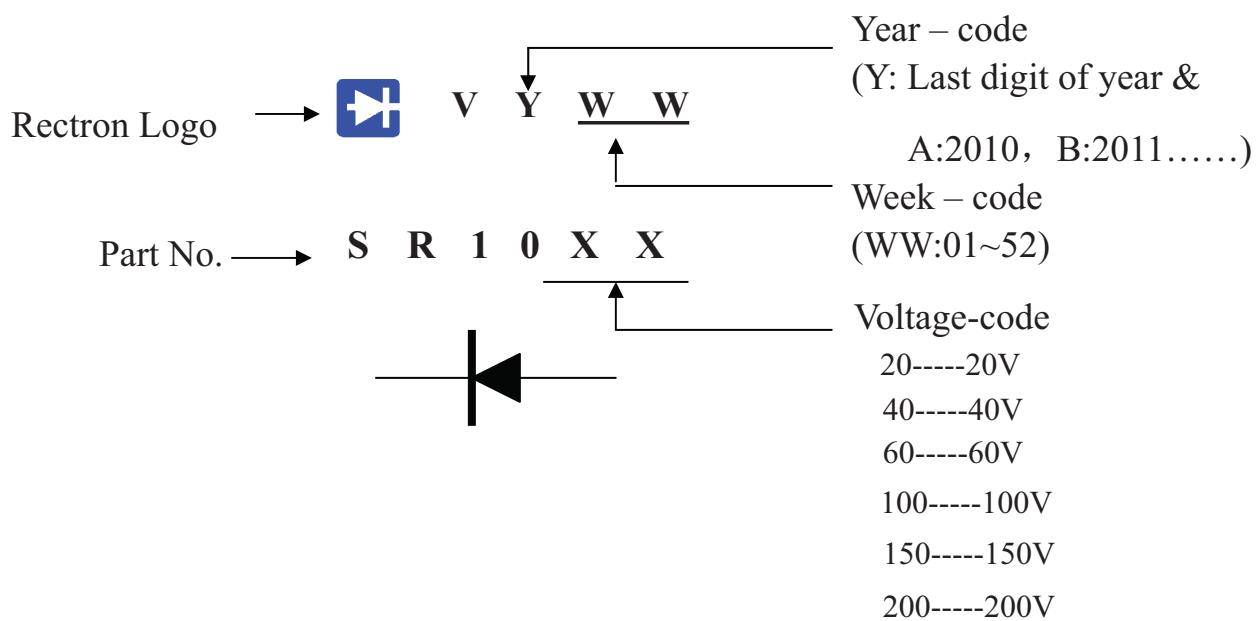


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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

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