

SCHOTTKY BARRIER RECTIFIER

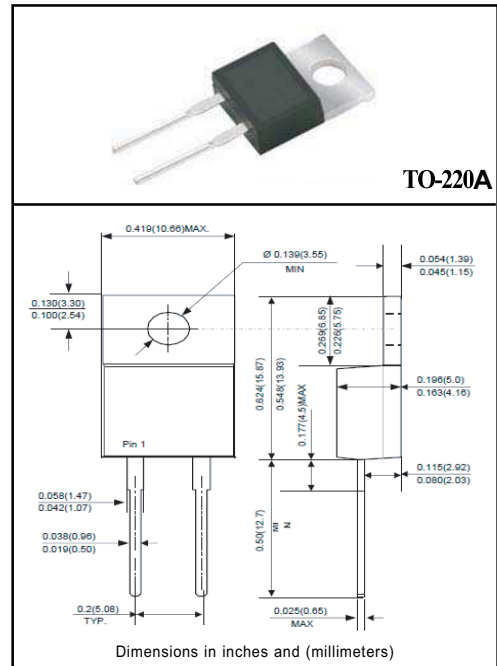
VOLTAGE RANGE 20 To 200 Volts CURRENT 10.0 Ampere

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	0.05			0.01			mA
		50						

- 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)".

2016-07
REV: A

RATING AND CHARACTERISTICS CURVES (SR1020 THRU SR10200)

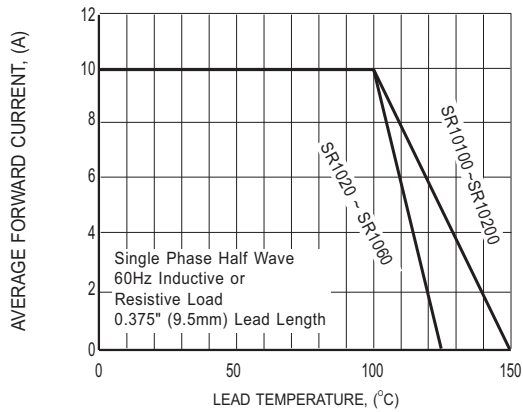


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

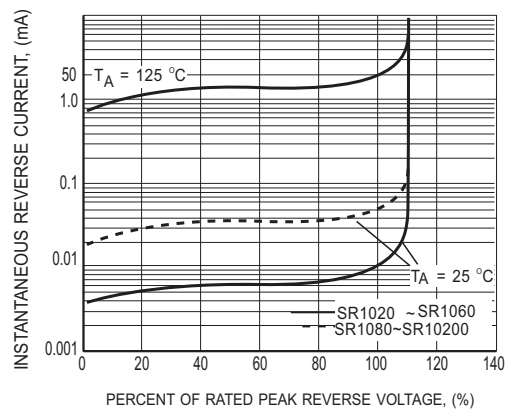


FIG.2 TYPICAL REVERSE CHARACTERISTICS

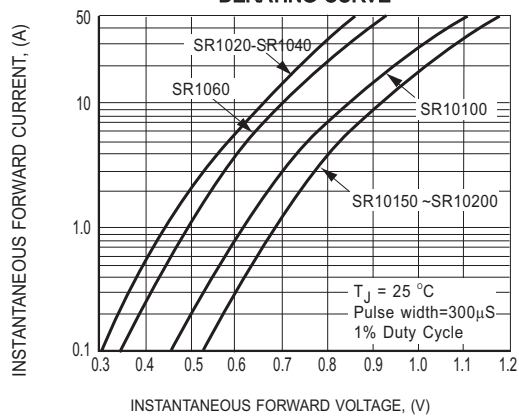


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

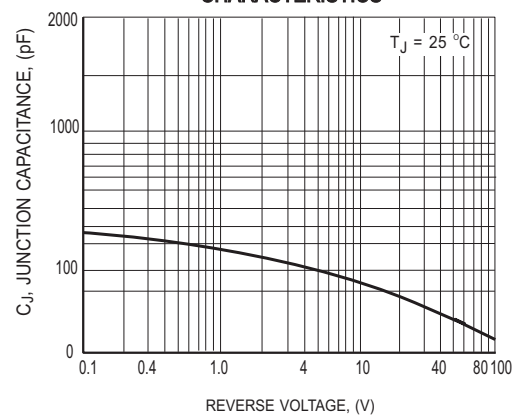


FIG.4 TYPICAL JUNCTION CAPACITANCE

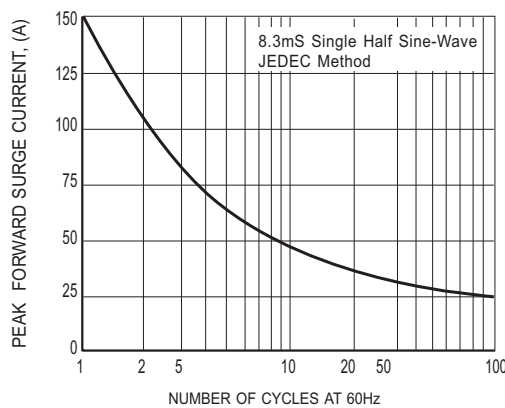
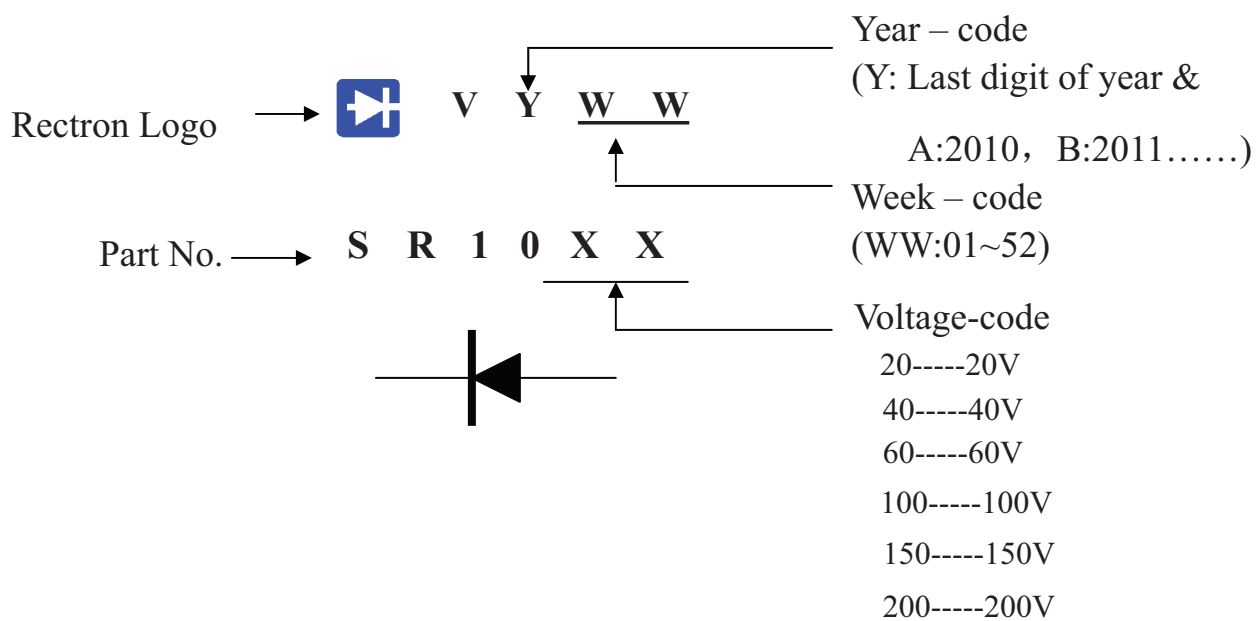


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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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