



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**SR1020
THRU
SR10200**

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 200 Volts

CURRENT - 10 Amperes

FEATURES

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

MECHANICAL DATA

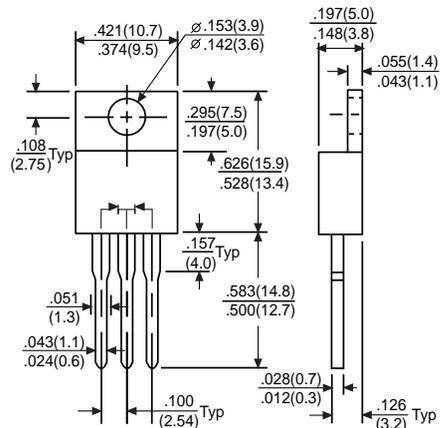
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



TO-220



Dimensions in inches and (millimeters)

	SYMBOL	SR1020	SR1030	SR1040	SR1050	SR1060	SR1080	SR10100	SR10150	SR10200	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I _o	10									Amps
Peak Forward Surge Current I _{FSM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150									Amps
Maximum Instantaneous Forward Voltage at 5.0A DC	V _F	0.70		0.80		0.85		0.95		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	@ T _C = 25°C									mAmps
		@ T _C = 100°C									
Typical Thermal Resistance (Note 1)	R _{θJC}	3.0									°C/W
Typical Junction Capacitance (Note 2)	C _J	700									pF
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150									°C

Note : 1. Thermal Resistance Junction to Case per leg.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Suffix "A" = Common Anode.
4. Suffix "F" Stands for "ITO-220" package. (e.g.: SR1020E, SR1030F,etc)

RATING AND CHARACTERISTIC CURVES (SR1020 THRU SR10200)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

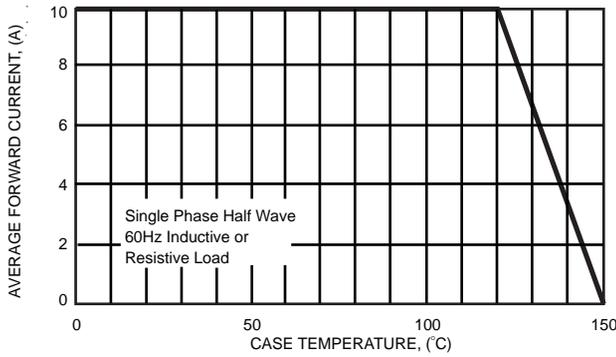


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

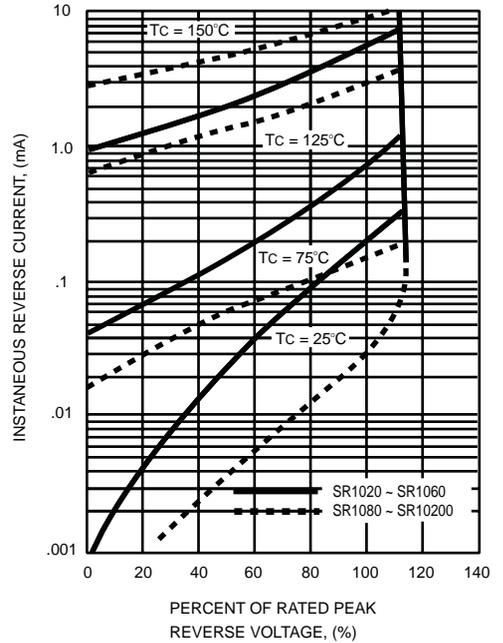


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

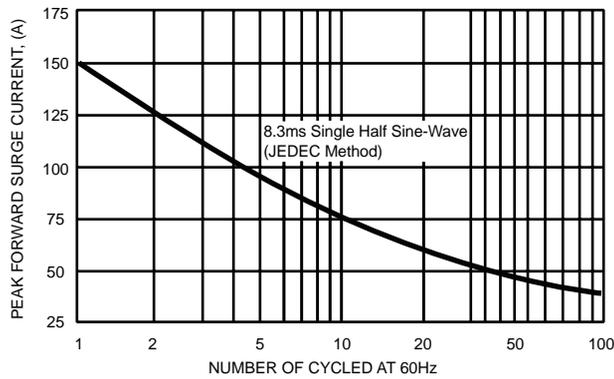


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

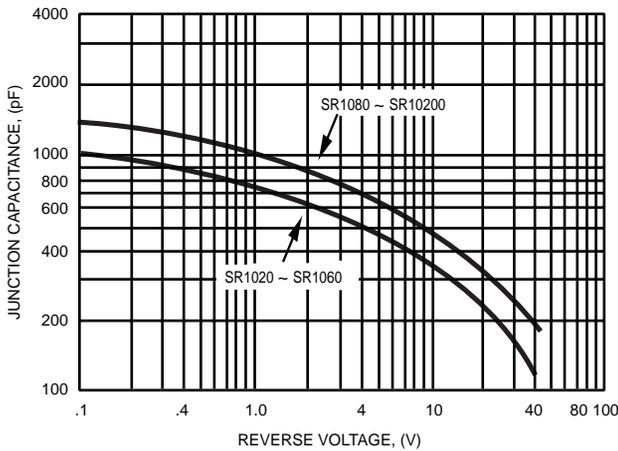
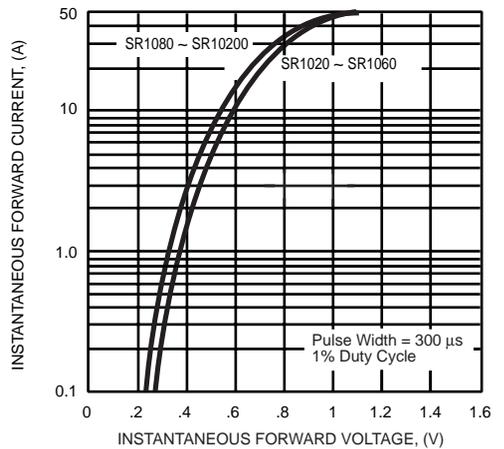


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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