



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SR2020
THRU
SR20100

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 100 Volts

CURRENT - 20 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

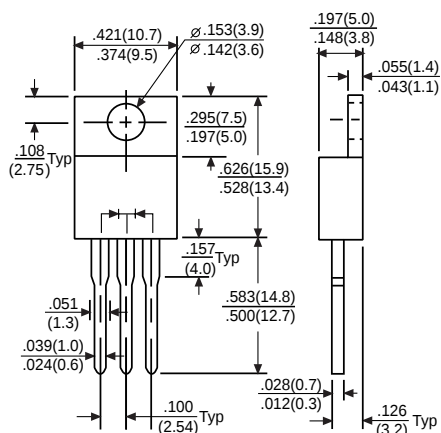
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any
- * Weight: 2.24 gram

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	SR2020	SR2030	SR2040	SR2050	SR2060	SR2080	SR20100	UNITS
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage		V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage		V _{DC}	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at Derating C _{sae} Temperature		I _O	20							Amps
Peak Forward Surge Current I _{FM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	150							Amps
Maximum Forward Voltage at 10A DC		V _F	0.65			0.75		0.85		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _C = 25°C	I _R	5.0							mAmps
	@T _C = 100°C		100							
Typical Thermal Resistance (Note 1)		R _{θJC}	3.5					°C/W		
Typical Junction Capacitance (Note 2)		C _J	700							pF
Operating and Storage Temperature Range		T _J , T _{STG}	-65 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.

RATING AND CHARACTERISTIC CURVES (SR2020 THRU SR20100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

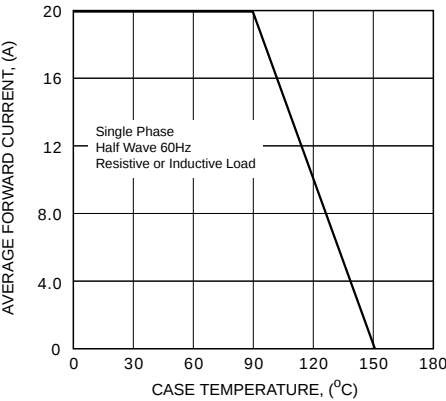


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

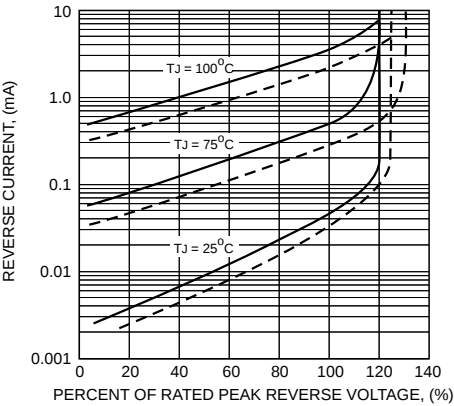


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

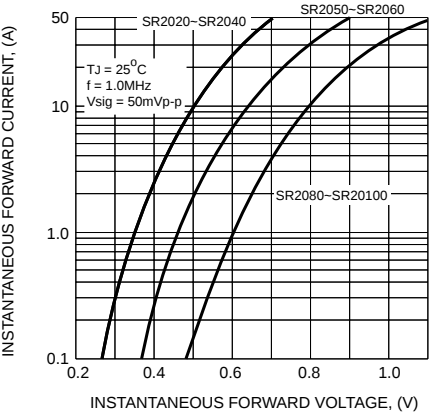


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

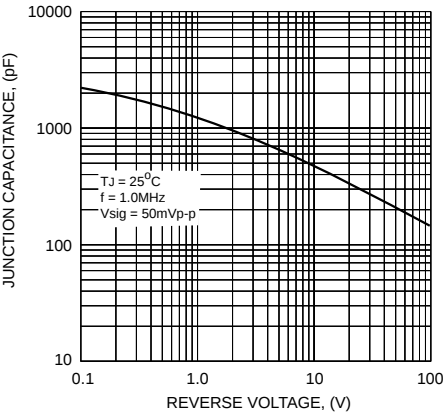


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

