



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SR520
THRU
SR5100

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 100 Volts

CURRENT - 5.0 Amperes

FEATURES

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

MECHANICAL DATA

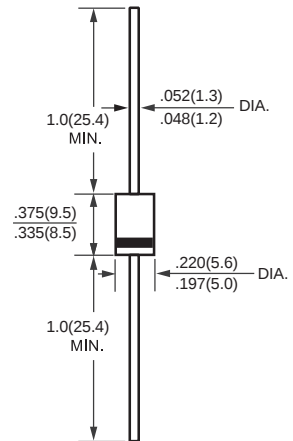
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.18 grams

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%.



DO-27



Dimensions in inches and (millimeters)

		SYMBOL	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	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 .375*(9.5mm) lead length		I _O	5.0							Amps
Peak Forward Surge Current 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	.55			.70		.85		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T _A = 25°C	I _R	2.0							mAmps
	@ T _A = 100°C		50							
Typical Thermal Resistance (Note 1)		R _{θJA}	18							°C/W
Typical Junction Capacitance (Note 2)		C _J	550			400				pF
Operating Temperature Range		T _J	-65 to +150							°C
Storage Temperature Range		T _{STG}	-65 to +150							°C

NOTES : 1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5*(12.7mm) Lead Length.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (SR520 THRU SR5100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

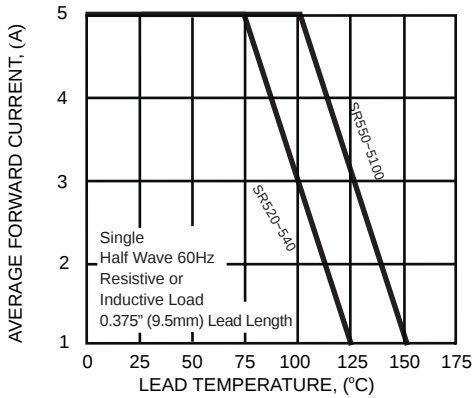


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

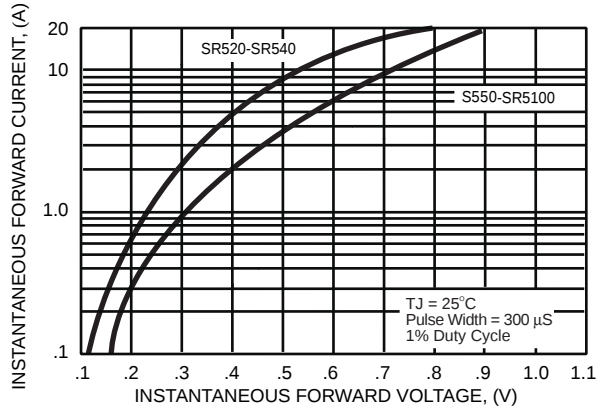


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

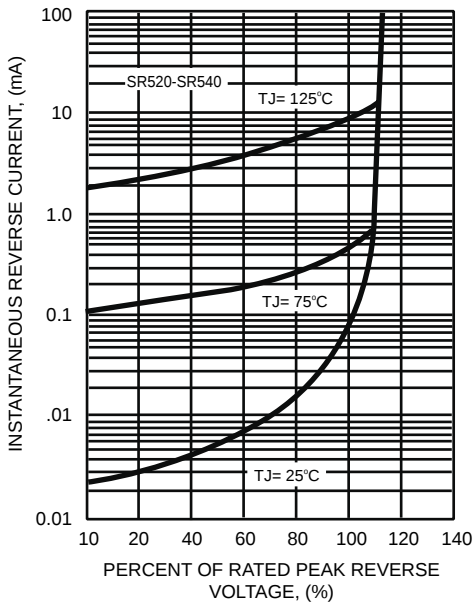


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

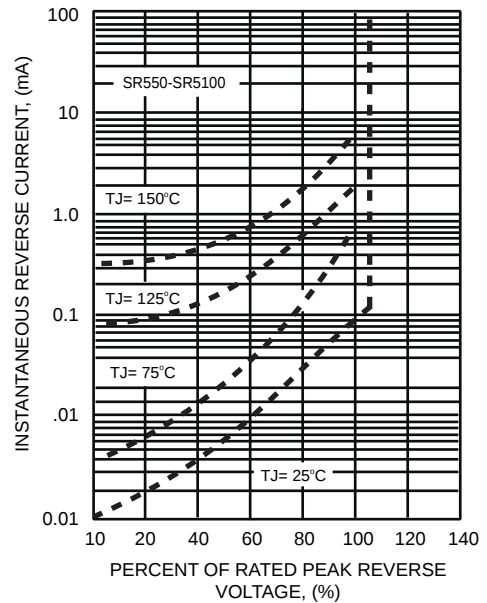


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

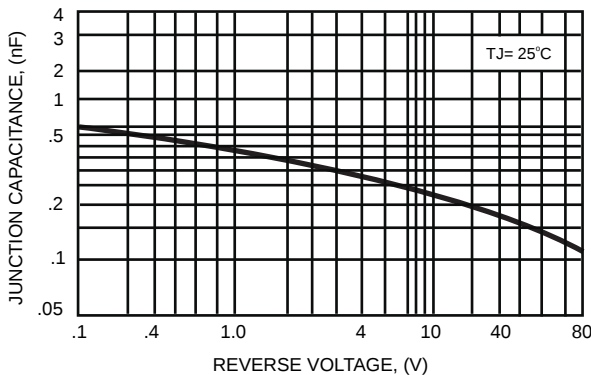
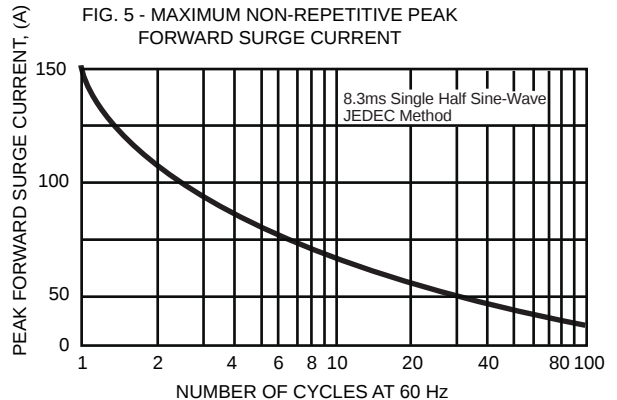


FIG. 5 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



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