RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

SR520
THRU
SR560

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 60 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: Device has UL flammability classification 94V-O
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 1.18 grams

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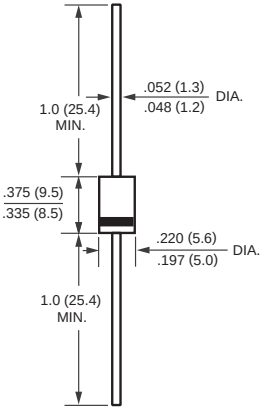

Dimensions in inches and (millimeters)

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 (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	SR520	SR530	SR540	SR550	SR560	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	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
Typical Thermal Resistance (Note 1)	$R\theta_{JA}$	18					°C/W
Typical Junction Capacitance (Note 2)	C_J	200					pF
Operating Temperature Range	T_J	-65 to + 125			-65 to + 150		°C
Storage Temperature Range	T_{STG}	-65 to + 150					°C

ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	SR520	SR530	SR540	SR550	SR560	UNITS
Maximum Instantaneous Forward Voltage at 5.0A DC	V_F	.55			.70		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage T_A = 25°C	I_R	10					mAmps

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.

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RATING AND CHARACTERISTIC CURVES (SR520 HRU SR560)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

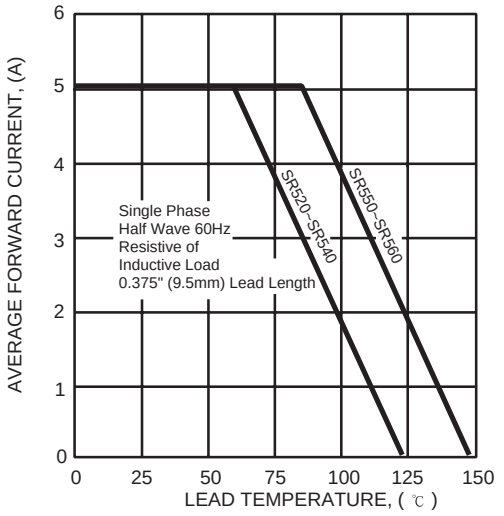

FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

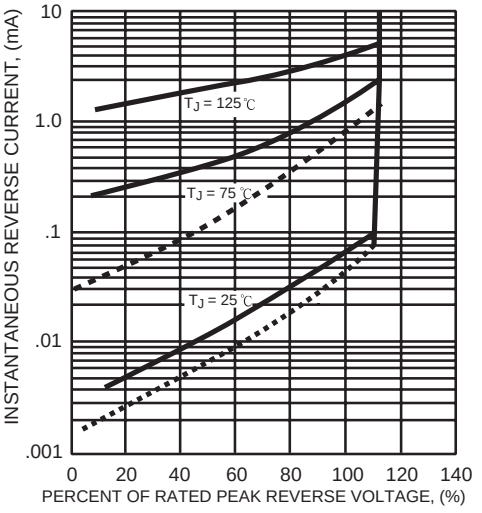

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

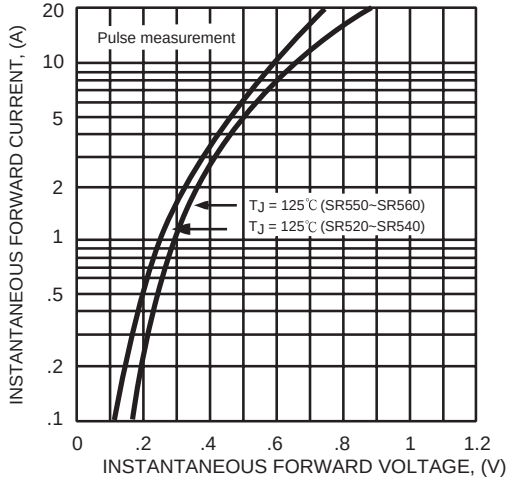

FIG. 4 - TYPICAL JUNCTION CAPACITANCE

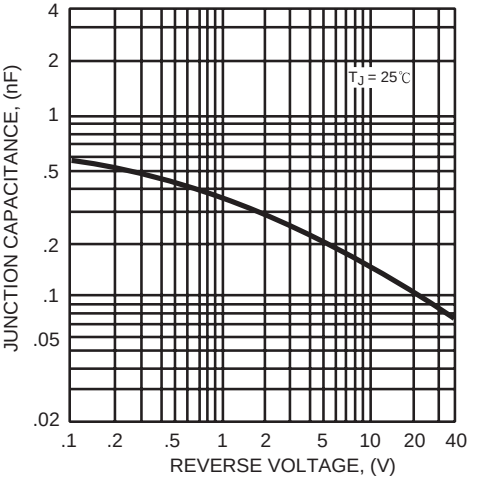

FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT