

## SR520 THRU SR5100

## SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE 20 to 100 Volts FORWARD CURRENT 5.0 Ampere

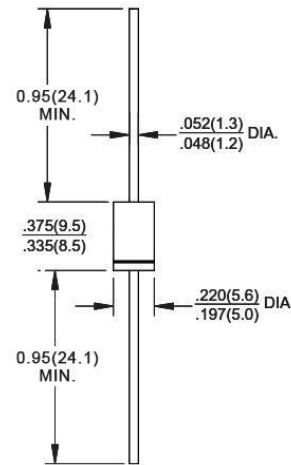
## FEATURES

- ◆ Low forward voltage drop
- ◆ Low leakage current
- ◆ High forward surge capability
- ◆ High reliability

## Mechanical Data

- ◆ Case: DO-27, Mold plastic
- ◆ Epoxy: UL94V-0 rate flame retardant
- ◆ Polarity: Indicated by cathode band
- ◆ Lead: MIL-STD-202E, Method 208 guaranteed
- ◆ Mounting position: Any

## DO-201AD(DO-27)



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

	SYMBOL	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	UNIT
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	$I_{(AV)}$	5.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150							Amps
Maximum Instantaneous Forward Voltage at 5.0A	$V_F$	0.55			0.70		0.85		Volts
Maximum DC Reverse Current $T_A=25^\circ\text{C}$ at rated DC Blocking voltage $T_A=100^\circ\text{C}$	$I_R$				0.5		50		mA
Typical Junction Capacitance (NOTE 1)	$C_J$	500			400				pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	10							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

Note: 2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

3. Thermal Resistance From Junction to Ambient at .375"(9.5mm) lead length, P.C. board mounted.

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### RATING AND CHARACTERISTIC CURVES SR520 THRU SR5100

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

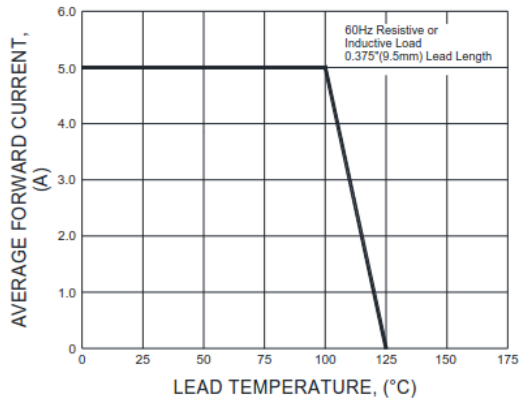


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

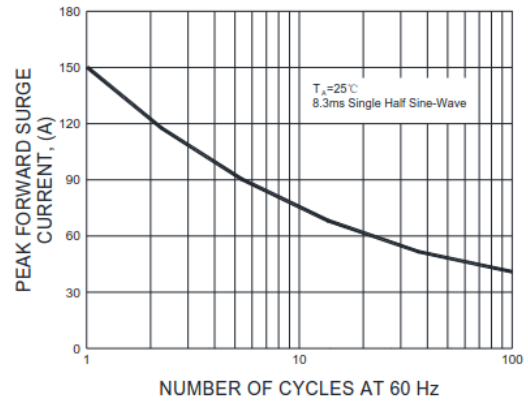


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

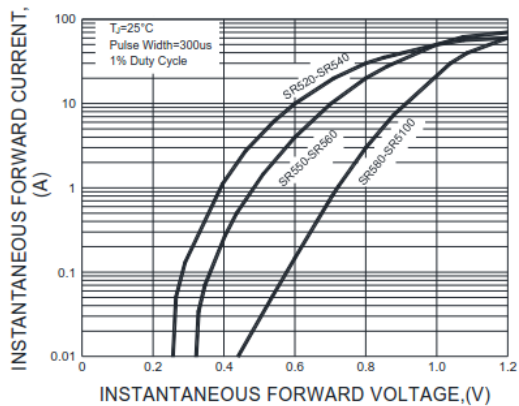


FIG.4-TYPICAL REVERSE CHARACTERISTICS

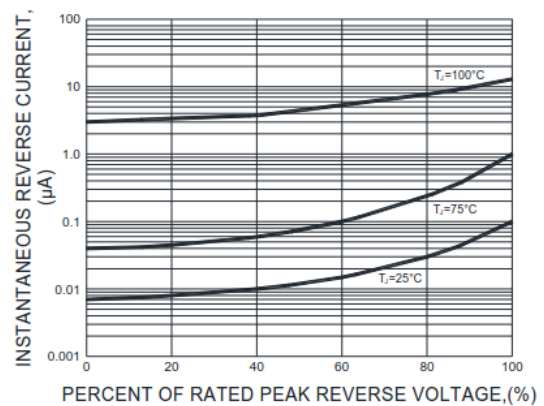
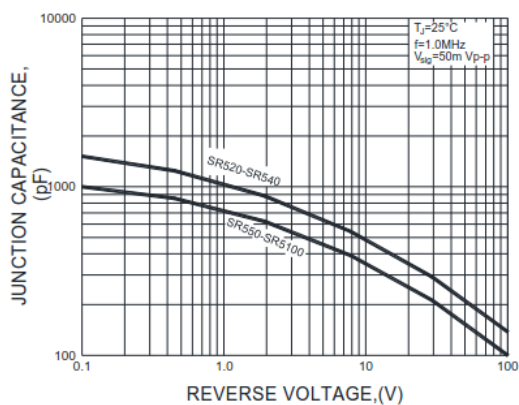


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.