

**SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE 20 to 200 Volts CURRENT 5.0 Ampere**

**FEATURES**

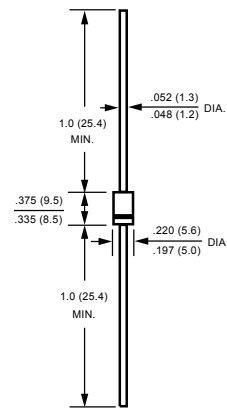
- \* High reliability
- \* Low switching loss
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability

**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-O
- \* Case: Molded plastic
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting: position: Any
- \* Weight: 1.18 grams



**DO-201AD**



**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 (@ TA=25 °C unless otherwise noted)**

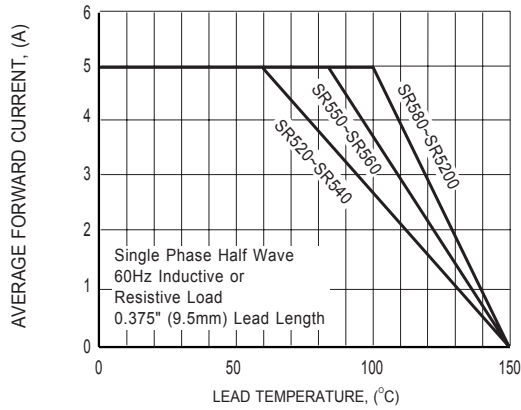
RATINGS	SYMBOL	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	SR5150	SR5200	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	$I_O$	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)	$R_{\theta JA}$	25									°C/W
	$R_{\theta JL}$	8									
Typical Junction Capacitance (Note 3)	$C_J$	200									pF
Operating Temperature Range	$T_J$	150									°C
Storage Temperature Range	$T_{STG}$	-55 to + 150									°C

**ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)**

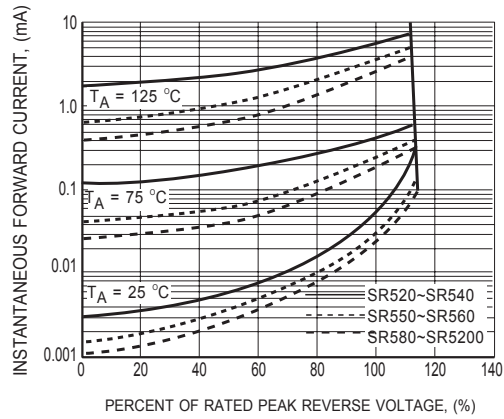
CHARACTERISTICS	SYMBOL	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	SR5150	SR5200	UNITS	
Maximum Instantaneous Forward Voltage at 5.0A DC	$V_F$	.55		.75			.85				Volts	
Maximum Average Reverse Current at Rated DC Blocking Voltage	$I_R$	@ $T_A = 25^\circ C$										mA
		@ $T_A = 100^\circ C$										2

- NOTES : 1. Thermal Resistance : At 9.5mm lead lengths, PCB mounted.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts. □  
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

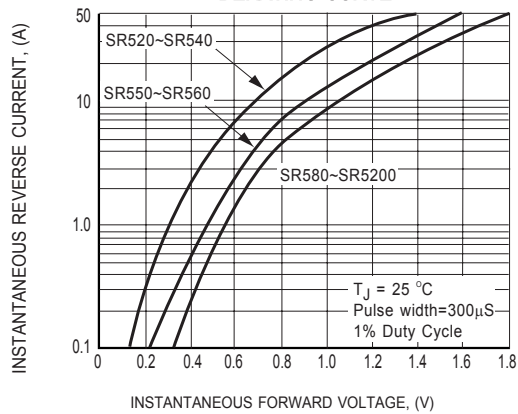
## RATING AND CHARACTERISTICS CURVES ( SR520 THRU SR5200 )



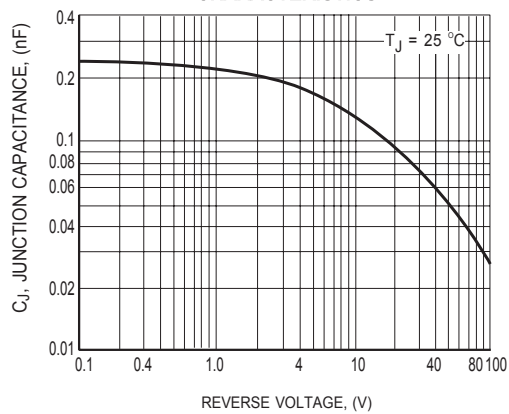
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



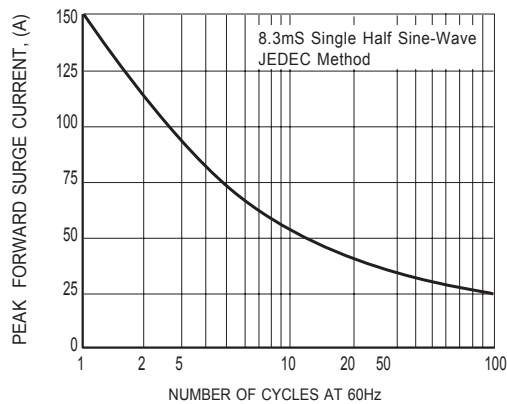
**FIG.2 TYPICAL REVERSE CHARACTERISTICS**



**FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4 TYPICAL JUNCTION CAPACITANCE**



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

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