



# SR220 THRU SR2A0

## 2.0 AMPS. SCHOTTKY BARRIER RECTIFIERS



### FEATURES

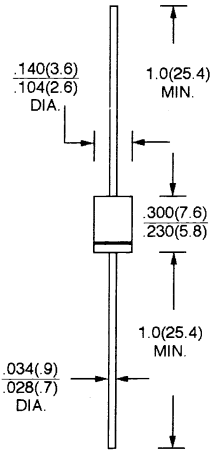
- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability

### MECHANICAL DATA

- \* Case: DO-41 Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Weight: 0.39grams

**VOLTAGE RANGE**  
50 to 1000 Volts  
**CURRENT**  
2.0 Amperes

### DO-15



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

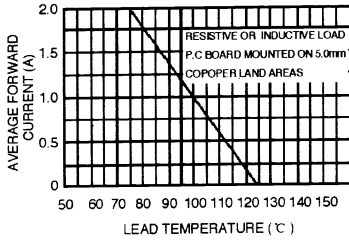
Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

	Symbols	SR 220	SR 230	SR 240	SR 250	SR 260	SR 280	SR 2A0	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V <sub>olts</sub>
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	57	71	V <sub>olts</sub>
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V <sub>olts</sub>
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length of $T_L = 75^\circ C$	$I_{(AV)}$	2.0							A <sub>mps</sub>
Peak Forward Surge Current 8.3 ms single half sine - wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50.0							A <sub>mps</sub>
Maximum Instantaneous Forward Voltage of 2.0A (Note 1)	$V_F$	0.55		0.70		0.85		V <sub>olts</sub>	
Maximum Instantaneous reverse Current of rated DC blocking voltage (Note 1)	$T_A = 25^\circ C$	1.0							mA
	$T_A = 100^\circ C$	20							
Typical junction capacitance (Note 3)	$C_J$	170							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	35.0							°C/W
Operating junction temperature range	$T_J$	-65 to +125							°C
Storage temperature range	$T_{STG}$	-65 to +150							°C

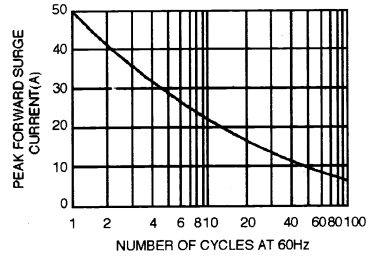
**NOTE:** (1) Pulse test: 300  $\mu s$  pulse width, 1% duty cycle  
 (2) Thermal resistance from junction to ambient, P. C. B. mounted with 0.375" (9.5mm) lead length with 1.5 x 1.5" (38 x 38mm) copper pads  
 (3) Measured at 1 MHz and applied reverse voltage of 4.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES (SR220 THRU SR2A0)

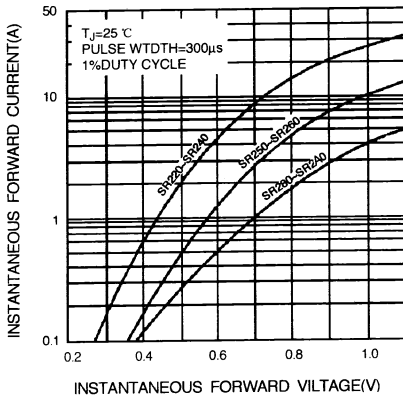
**FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE**



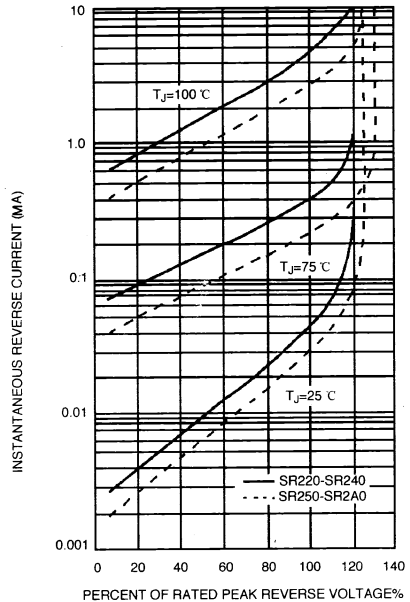
**FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG. 4 – TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 – TYPICAL JUNCTION CAPACITANCE**

