# **SR220 THRU SR2200**

### SCHOTTKY BARRIER RECTIFIER



REVERSE VOLTAGE: 20 to 200 VOLTS FORWARD CURRENT: 2.0 AMPERE

### **FEATURES**

· High current capabillty

· High surge current capability

· Low forward voltage drop

· Exceeds environmental standards of MIL-S-19500/228

· For use in low voltage, high frequency inverters free wheeling, and porlarlity protection applications

· Suffix "H" indicates Halogen-free parts, ex. SR220H.

#### **MECHANICAL DATA**

Case: Molded plastic, DO-15

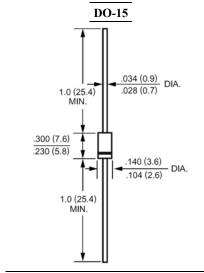
Epoxy: UL 94V-O rate flame retardant

Lead: Axial leads, solderable per MIL-STD-202,

method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any



**Dimensions in inchs and (millimeters)** 

## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbols	SR220	SR230	SR240	SR250	SR260	SR280	SR2100	SR2150	SR2200	Units
Maximum Recerrent 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	T	2.0									Amp
.375"(9.5mm) Lead Length	I <sub>(AV)</sub>										
Peak Forward Surge Current,	I <sub>FSM</sub> 50.0										
8.3ms single half-sine-wave									Amp		
superimposed on rated load (JEDEC method)											
Maximum Forward Voltage at 2.0A DC and 25℃	$V_{\rm F}$	0.55 0.70 0.85 0.95				95	Volts				
Maximum Reverse Current at T <sub>A</sub> =25℃	I <sub>R</sub> 0.5										
at Rated DC Blocking Voltage T <sub>A</sub> =100℃										mAmp	
Typical Junction Capacitance (Note 1)	$C_{J}$	180									pF
Typical Thermal Resistance (Note 2)	R <sub>0 JA</sub>	45.0									°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , Tstg	-55 to +125								°C	

#### NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted





#### RATINGS AND CHARACTERISTIC CURVES

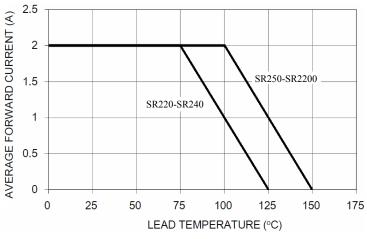


FIG.1- FORWARD CURRENT DERATING CURVE

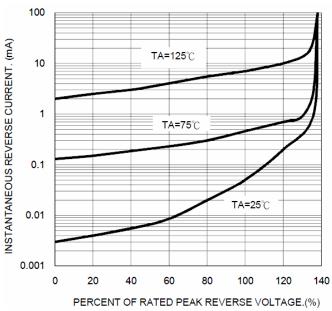


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

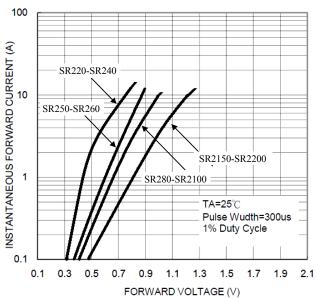


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

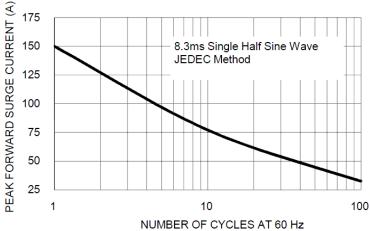


FIG. 4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

