# **SR320 THRU SR3200**

# SCHOTTKY BARRIER RECTIFIER



REVERSE VOLTAGE: 20 to 200 VOLTS FORWARD CURRENT: 3.0 AMPERE

#### **FEATURES**

· High current capability

· 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

### **MECHANICAL DATA**

Case: Molded plastic, DO-201AD

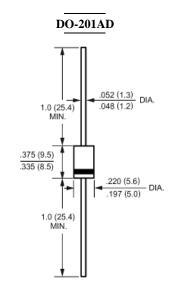
Epoxy: UL 94V-O rate flame retardant

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

method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any Weight: 0.04ounce, 1.1gram



**Dimensions in inches and (millimeters)** 

# Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave,  $60H_Z$ , resistive or inductive load.

For capacitive load, derate current by 20%.

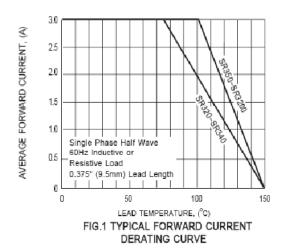
	Symbols	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	SR3150	SR3200	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length	I <sub>(AV)</sub>	3.0									Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave	$I_{FSM}$	80									Amp
superimposed on rated load (JEDEC method)											
Maximum Forward Voltage at 3.0A DC and 25℃	$V_{\rm F}$	0.55			0	0.7		.85 0.		95	Volts
Maximum Reverse Current at $T_A$ =25 $^{\circ}$ C at Rated DC Blocking Voltage $T_A$ =100 $^{\circ}$ C	$I_R$	2.0 30									mAmp
Typical Junction Capacitance (Note 1)	$C_{J}$	200									pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40									℃/W
Operating Junction Temperature Range	$T_{J}$	-55 to +125 -55 to +150							${\mathfrak C}$		
Storage Temperature Range	Tstg	-55 to +150									${\mathfrak C}$

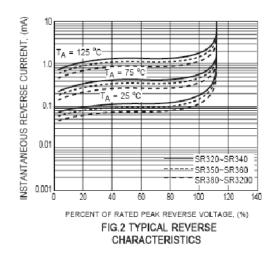
#### NOTES:

- 1- Measured at 1  $\ensuremath{\text{MH}_{\text{Z}}}$  and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted



### RATINGS AND CHARACTERISTIC CURVES





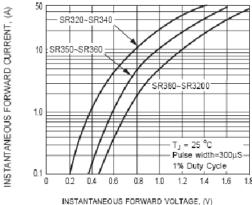


FIG.3 TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTICS

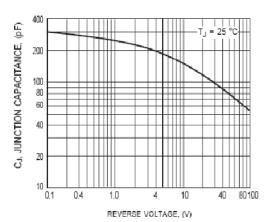


FIG.4 TYPICAL JUNCTION CAPACITANCE

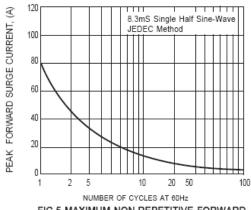


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT