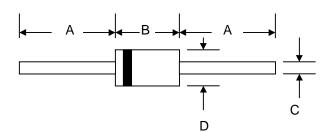


## SR320 - SR3100

3.0A Axial Leaded Schottky Barrier Diode

## **Features**

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



## **Mechanical Data**

Case: DO-201AD, Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

Polarity: Cathode Band

• Weight: 1.2 grams (approx.)

Mounting Position: Any
Marking: Type Number

Marking: Type Number

Lead Free: For RoHS / Lead Free Version,
Add "-LF" Suffix to Part Number, See Page 4

DO-201AD							
Dim	Min	Max					
Α	25.4	_					
В	7.20	9.50					
С	1.20	1.30					
D	4.80	5.30					
All Dimensions in mm							

## Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

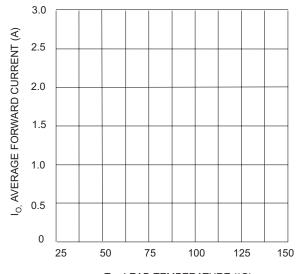
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	80	100	٧
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	70	V
Average Rectified Output Current @T <sub>L</sub> = 95°C (Note 1)	lo	3.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	80							Α
Forward Voltage @I <sub>F</sub> = 3.0A	VFM	0.50 0.75 0.85				85	V		
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	IRM	0.5 20						mA	
Typical Junction Capacitance (Note 2)	Cj	250						pF	
Typical Thermal Resistance (Note 1)	$R_{ heta}JA$	20						°C/W	
Operating and Storage Temperature Range	Тj, Tsтg	-65 to +150						°C	

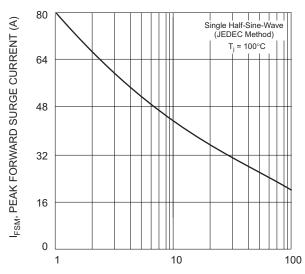
Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

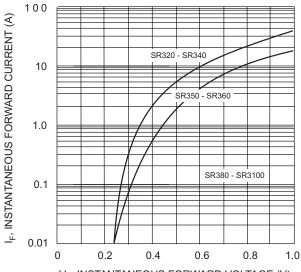




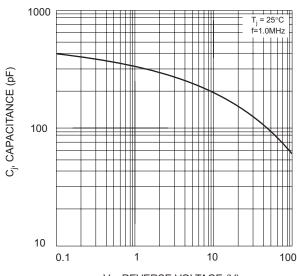
 $T_L$ , LEAD TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve



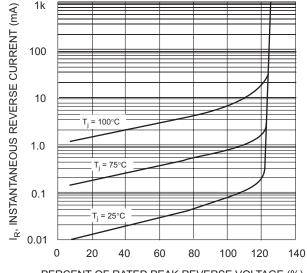
NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



 $V_R$ , REVERSE VOLTAGE (V) Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics