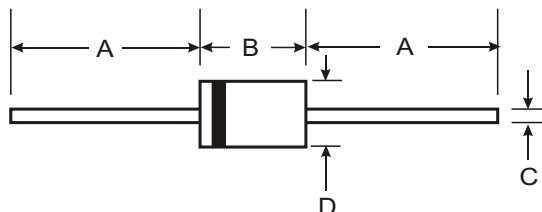


## Features

- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- Very Low Forward Voltage Drop
- Plastic Material - UL Flammability Classification 94V-0



## Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.1 grams (approx.)
- Marking: Type Number

DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

## Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	SB330L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage @ $I_R = 1\text{mA}$	$V_{RRM}$ $V_{RWM}$ $V_R$	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Average Rectified Output Current (Note 1) @ $T_L = 80^\circ\text{C}$	$I_O$	3.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	90	A
Forward Voltage @ $I_F = 3.0\text{A}$	$V_{FM}$	0.37	V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 70^\circ\text{C}$	$I_{RM}$	1 20	mA
Typical Junction Capacitance (Note 2)	$C_j$	140	pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	10	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-40 to +125	$^\circ\text{C}$

Notes: 1. Measured at ambient temperature at a distance of 9.5mm from the case.  
 2. Measured at 1.0 MHz and applied reverse voltage of 10V DC.

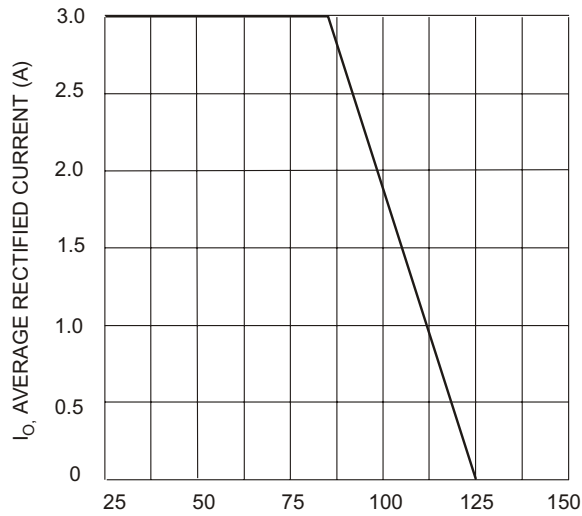


Fig. 1 Forward Current Derating Curve

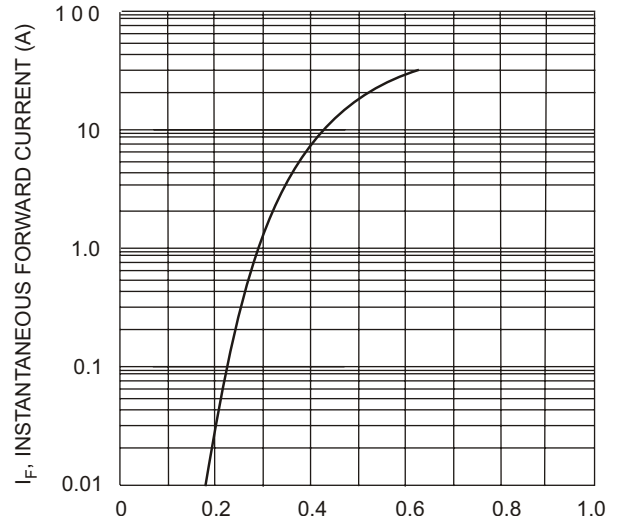


Fig. 2 Typical Forward Characteristics

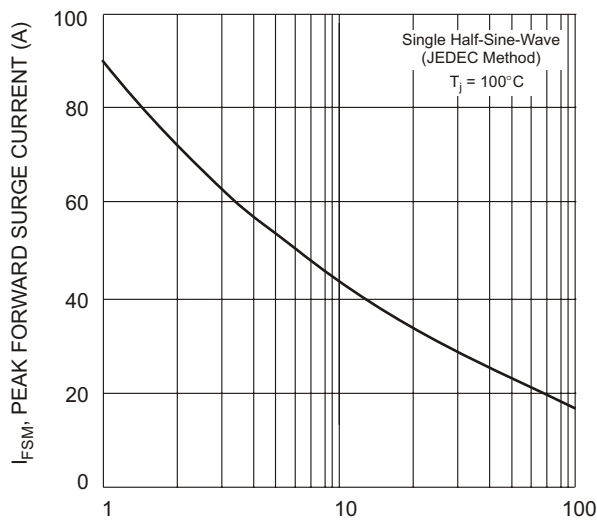


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

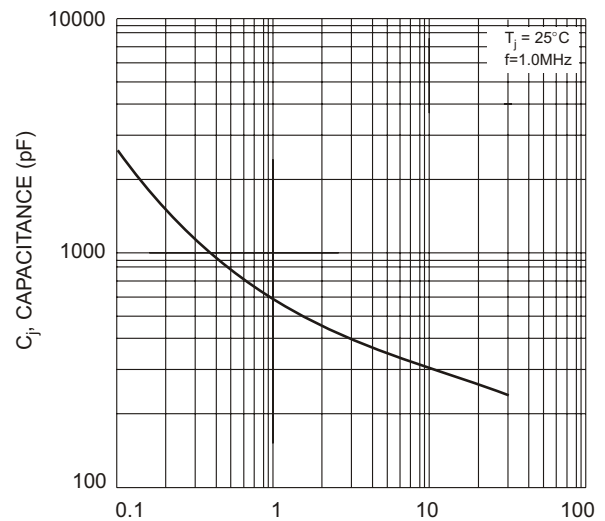


Fig. 4 Typical Junction Capacitance

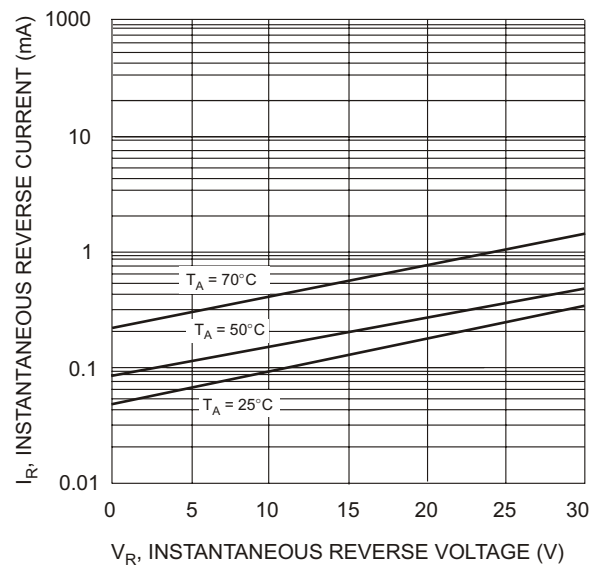


Fig. 5 Typical Reverse Characteristics