



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Features

- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 80A Peak
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **IEC 61000-4-2 (ESD - 150pF/330Ω) Contact - ±15kV**

Mechanical Data

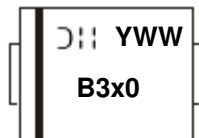
- Case: DO-201AD
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - Tin. Solderable per MIL-STD-202, Method 208③
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 1.1 grams (Approximate)

Ordering Information (Note 3)

Device	Packaging	Shipping
SB320-B	DO-201AD	500/Bulk
SB320-T	DO-201AD	1200/13" Tape & Reel
SB330-B	DO-201AD	500/Bulk
SB330-T	DO-201AD	1200/13" Tape & Reel
SB340-B	DO-201AD	500/Bulk
SB340-T	DO-201AD	1200/13" Tape & Reel
SB350-B	DO-201AD	500/Bulk
SB350-T	DO-201AD	1200/13" Tape & Reel
SB360-B	DO-201AD	500/Bulk
SB360-T	DO-201AD	1200/13" Tape & Reel

- Notes:
1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.
 2. See http://www.diodes.com/quality/lead_free.html for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
 3. For packaging details, go to our website at <http://www.diodes.com/products/packages.html>

Marking Information



B3x0 = Product Type Marking Code, ex: B320
 ⏏ = Manufacturers' Code Marking
 YWW = Date Code Marking
 Y = Last Digit of Year (ex: 6 for 2016)
 WW = Week Code (01 to 53)

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

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

Characteristic	Symbol	SB320	SB330	SB340	SB350	SB360	Unit
Peak Repetitive Reverse Voltage	V _{RRM}						
Working Peak Reverse Voltage	V _{RWM}	20	30	40	50	60	V
DC Blocking Voltage (Note 5)	V _R						
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	35	42	V
Average Rectified Output Current (Note 4) (See Figure 1)	I _O	3.0					A
Non-Repetitive Peak Forward Surge Current 8.3ms	I _{FSM}	80					A
Single Half Sine-Wave Superimposed on Rated Load							

Thermal Characteristics

Characteristic	Symbol	SB320	SB330	SB340	SB350	SB360	Unit
Typical Thermal Resistance (Note 6)	R _{θJA}	30					°C/W
	R _{θJL}	10					°C/W
Operating Temperature Range	T _J	-65 to +125			-65 to +150		°C
Storage Temperature Range	T _{STG}	-65 to +150					°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	SB320	SB330	SB340	SB350	SB360	Unit
Forward Voltage @ I _F = 3.0A	V _{FM}	0.50			0.74		V
Peak Reverse Current @ T _A = +25°C	I _{RM}	0.5					mA
at Rated DC Blocking Voltage (Note 5) @ T _A = +100°C		20			10		

- Notes:
4. Measured at ambient temperature at a distance of 9.5mm from the case.
 5. Short duration pulse test used to minimize self-heating effect.
 6. Thermal resistance from junction to lead vertical P.C.B. mounted, 0.500" (12.7mm) lead length with 2.5" x 2.5" (63.5 x 63.5mm) copper pad.

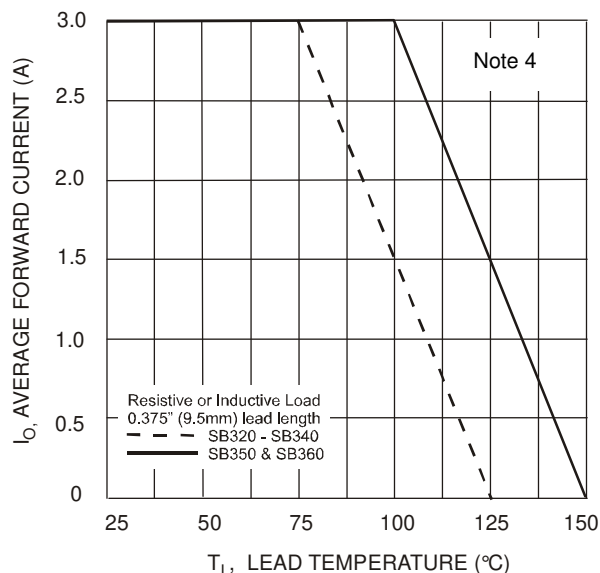


Fig. 1 Forward Current Derating Curve

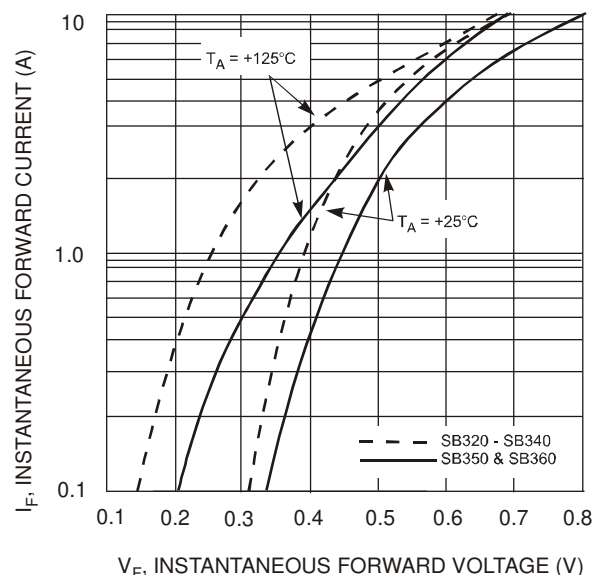


Fig. 2 Typical Forward Characteristics

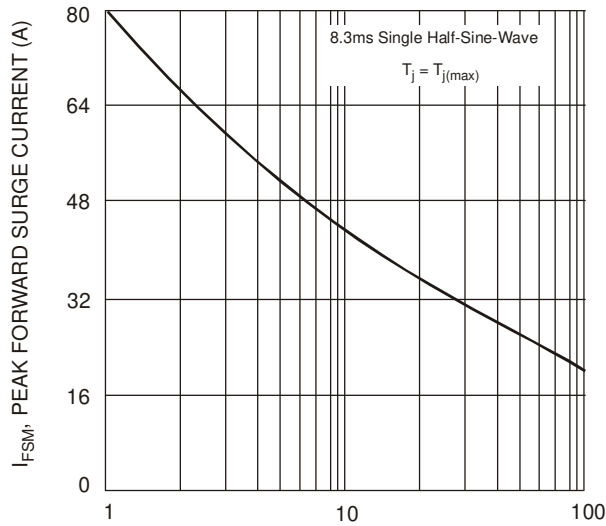


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

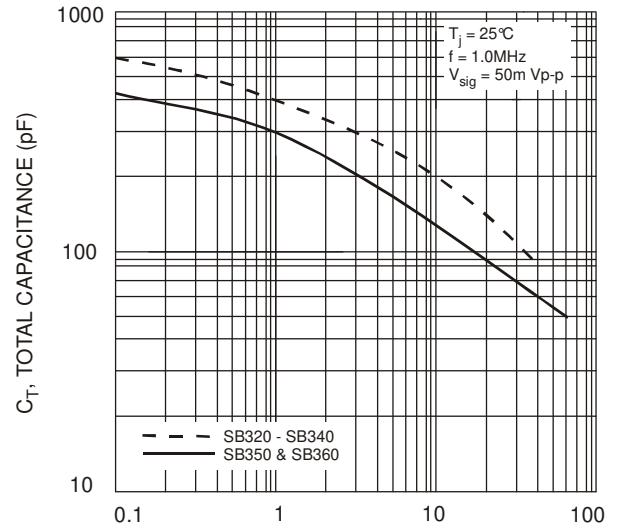


Fig. 4 Typical Total Capacitance

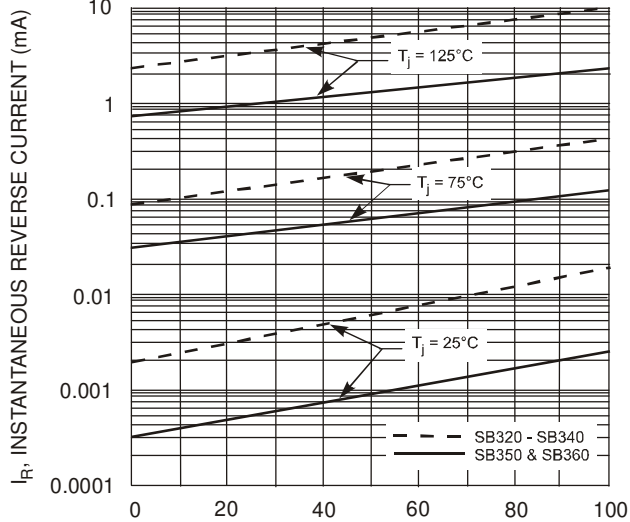
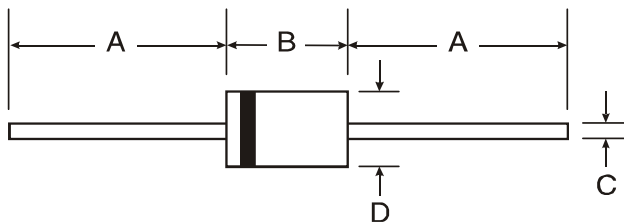


Fig. 5 Typical Reverse Characteristics

Package Outline Dimensions

Please see AP02001 at http://www.diodes.com/_files/datasheets/ap02001.pdf for the latest version.

DO-201AD



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		

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