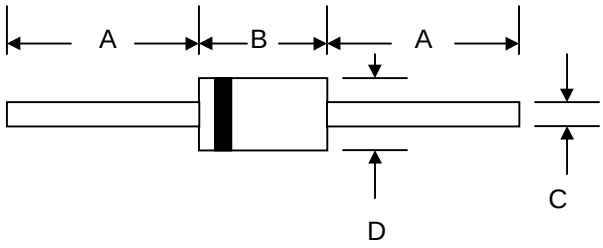
SB320 – SB3100

3.0A 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
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

DO-201AD		
Dim	**Min**	**Max**
A	25.4	—
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°C unless otherwise specified

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

Characteristic	Symbol	SB320	SB330	SB340	SB350	SB360	SB380	SB3100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	80	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	V
Average Rectified Output Current @T_L = 95°C (Note 1)	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}	80							A
Forward Voltage @I_F = 3.0A	V_{FM}	0.50			0.75		0.85		V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	0.5 20							mA
Typical Junction Capacitance (Note 2)	C_j	250							pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	20							°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-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.

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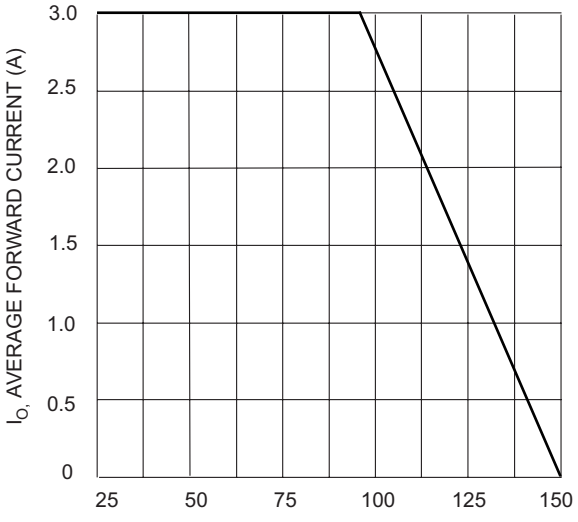


Fig. 1 Forward Current Derating Curve

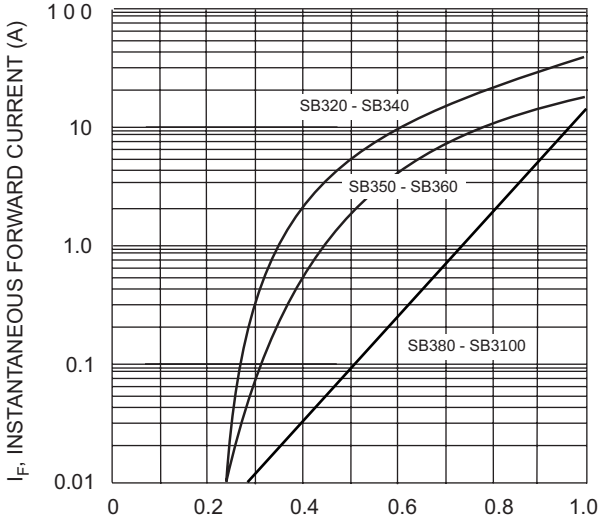


Fig. 2 Typical Forward Characteristics

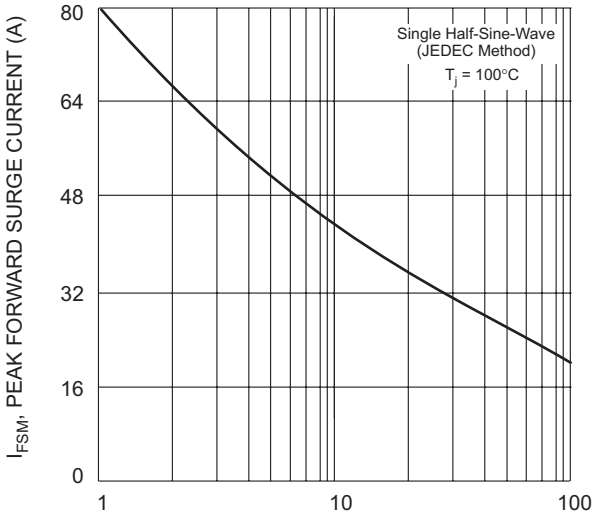


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

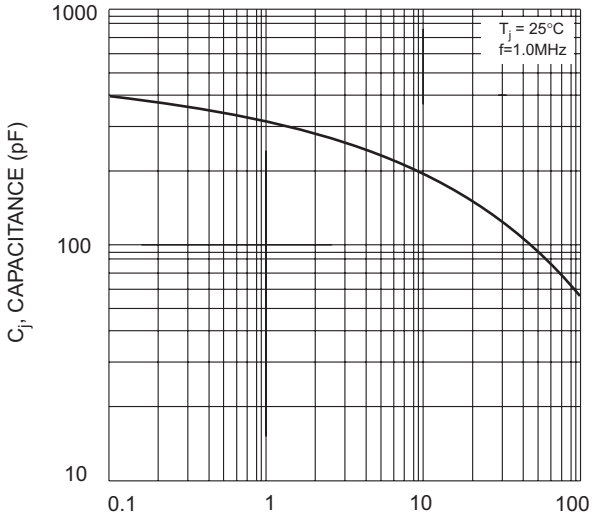


Fig. 4 Typical Junction Capacitance

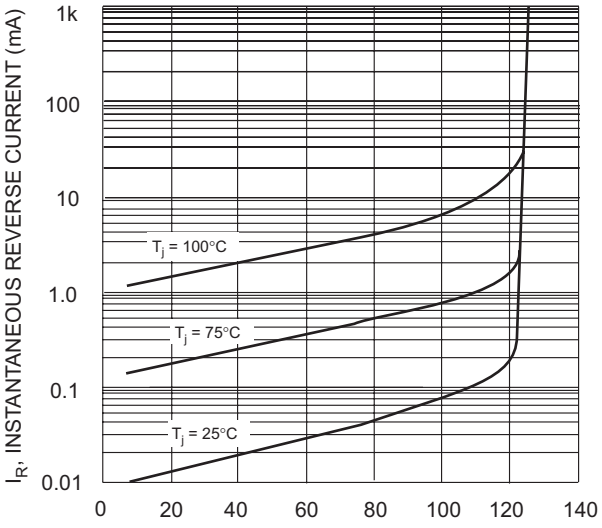
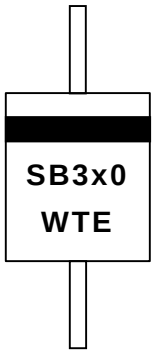


Fig. 5 Typical Reverse Characteristics

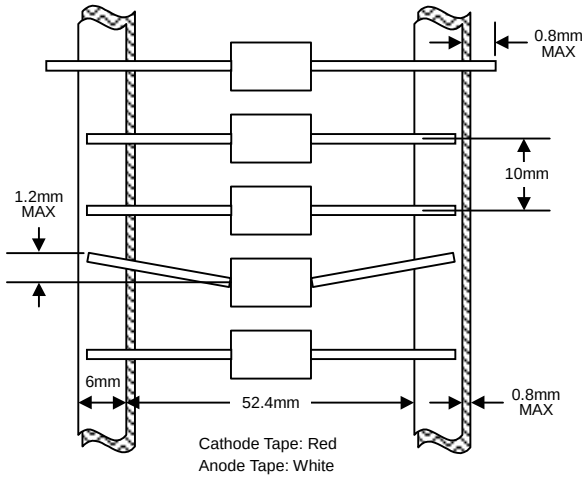
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MARKING INFORMATION



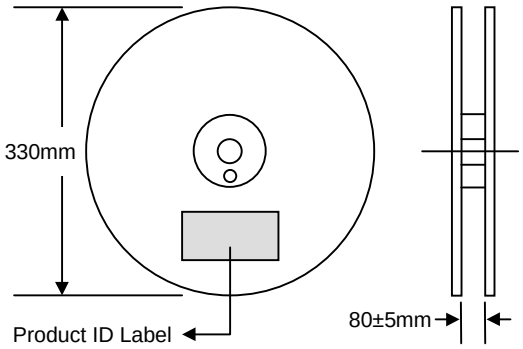
Cathode	= Polarity Band
SB3x0	= Device Number
x	= 2, 3, 4, 5, 6, 8 or 10
WTE	= Manufacturer's Logo

TAPING SPECIFICATIONS

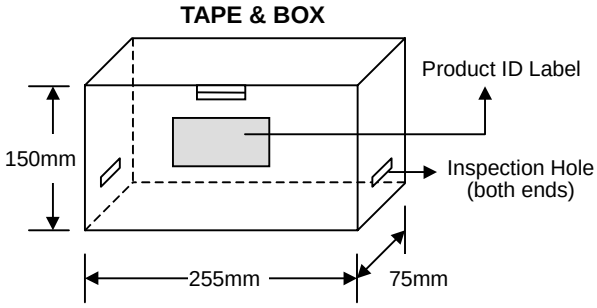


PACKAGING INFORMATION

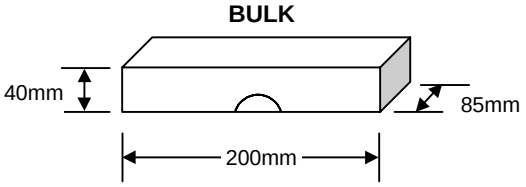
TAPE & REEL



TAPE & BOX



BULK



Packaging	Reel Diameter / Box Size (mm)	Quantity (PCS)	Carton Size (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
TAPE & REEL	330	1,200	370 x 370 x 420	6,000	10.0
TAPE & BOX	255 x 75 x 150	1,200	400 x 273 x 415	12,000	17.0
BULK	200 x 85 x 40	500	459 x 214 x 256	12,500	16.0

Note: 1. Paper reel, white or gray color. Core material: plastic or metal.
2. Components are packed in accordance with EIA standard RS-296-E.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SB320-T3	DO-201AD	1200/Tape & Reel
SB320-TB	DO-201AD	1200/Tape & Box
SB320	DO-201AD	500 Units/Box
SB330-T3	DO-201AD	1200/Tape & Reel
SB330-TB	DO-201AD	1200/Tape & Box
SB330	DO-201AD	500 Units/Box
SB340-T3	DO-201AD	1200/Tape & Reel
SB340-TB	DO-201AD	1200/Tape & Box
SB340	DO-201AD	500 Units/Box
SB350-T3	DO-201AD	1200/Tape & Reel
SB350-TB	DO-201AD	1200/Tape & Box
SB350	DO-201AD	500 Units/Box
SB360-T3	DO-201AD	1200/Tape & Reel
SB360-TB	DO-201AD	1200/Tape & Box
SB360	DO-201AD	500 Units/Box
SB380-T3	DO-201AD	1200/Tape & Reel
SB380-TB	DO-201AD	1200/Tape & Box
SB380	DO-201AD	500 Units/Box
SB3100-T3	DO-201AD	1200/Tape & Reel
SB3100-TB	DO-201AD	1200/Tape & Box
SB3100	DO-201AD	500 Units/Box

1. Products listed in **bold** are WTE **Preferred** devices.
2. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
3. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SB320-TB-LF**.

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan
Phone: 886-7-822-5408 or 886-7-822-5410
Fax: 886-7-822-5417
Email: sales@wontop.com
Internet: http://www.wontop.com

We power your everyday.

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