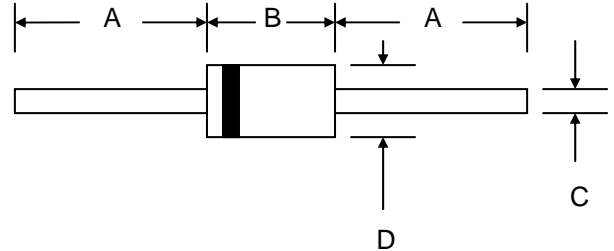


Features

- Schottky Barrier Chip
- Guard Ring for Transient and ESD Protection
- Surge Overload Rating to 150A Peak
- Low Power Loss, High Efficiency
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes



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**

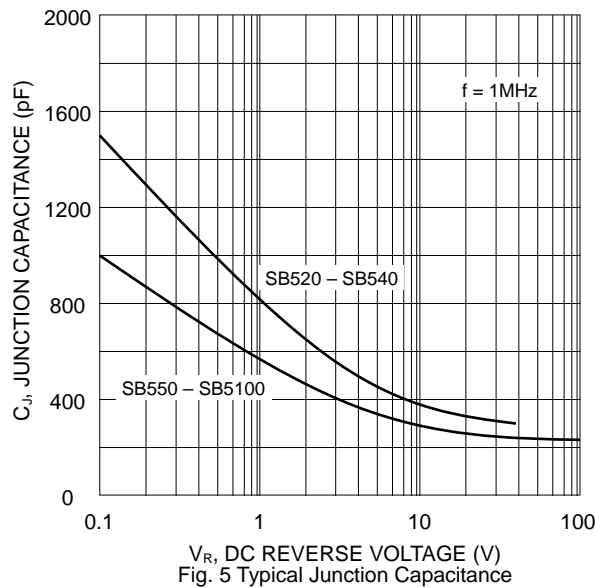
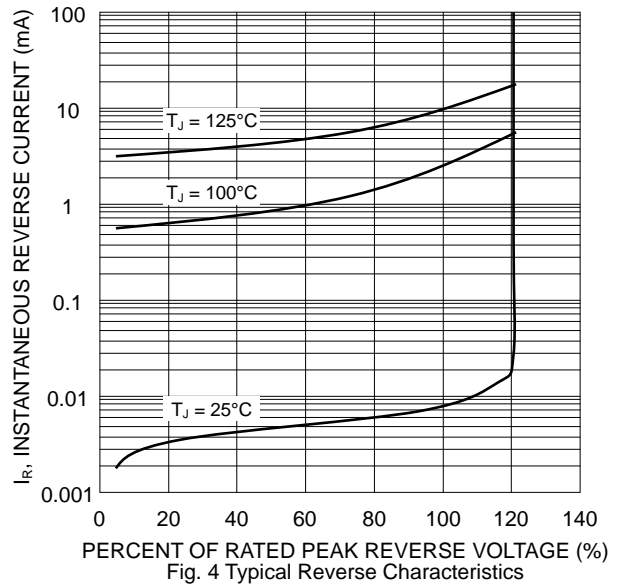
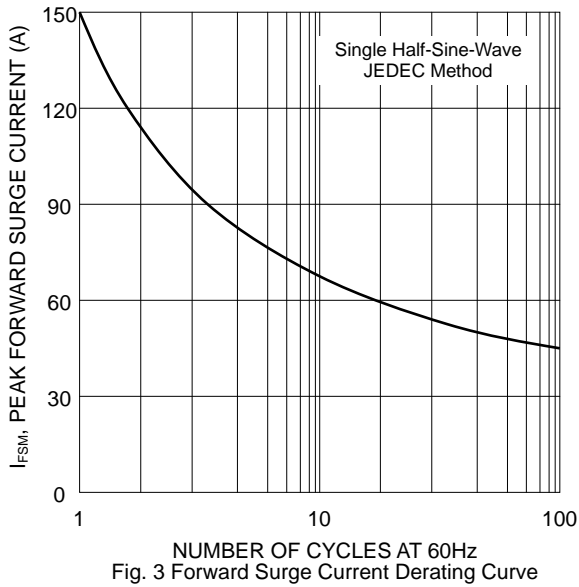
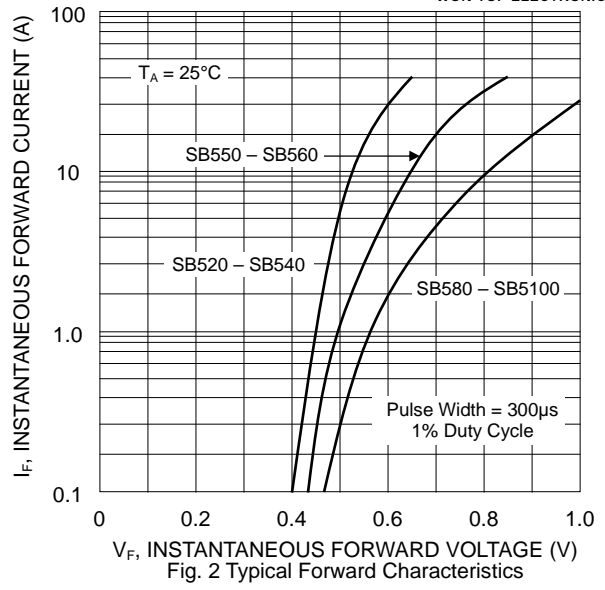
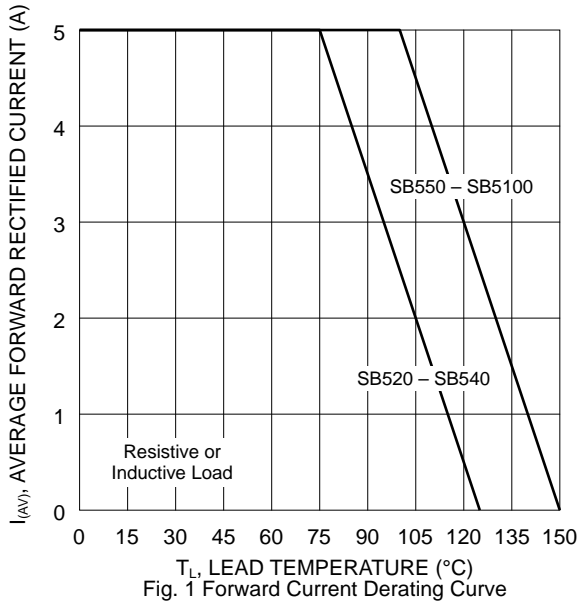
DO-201AD		
Dim	Min	Max
A	25.4	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

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

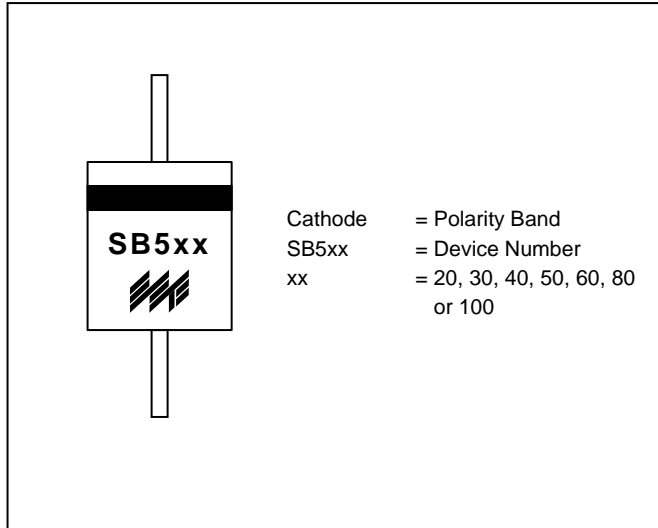
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	SB520	SB530	SB540	SB550	SB560	SB580	SB5100	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	V
Average Rectified Output Current (Note 1)	I_O	5.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150							A
Forward Voltage @ $I_F = 5.0\text{A}$	V_{FM}	0.55		0.70		0.85			V
Peak Reverse Current @ $T_J = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J = 100^\circ\text{C}$	I_{RM}	0.5 20							mA
Typical Junction Capacitance (Note 2)	C_J	500			380				pF
Thermal Resistance, Junction to Ambient (Note 3)	R_{JA}	25							°C/W
Thermal Resistance, Junction to Lead (Note 3)	R_{JL}	8.0							
Operating Temperature Range	T_J	-65 to +125			-65 to +150				°C
Storage Temperature Range	T_{STG}	-65 to +150							°C

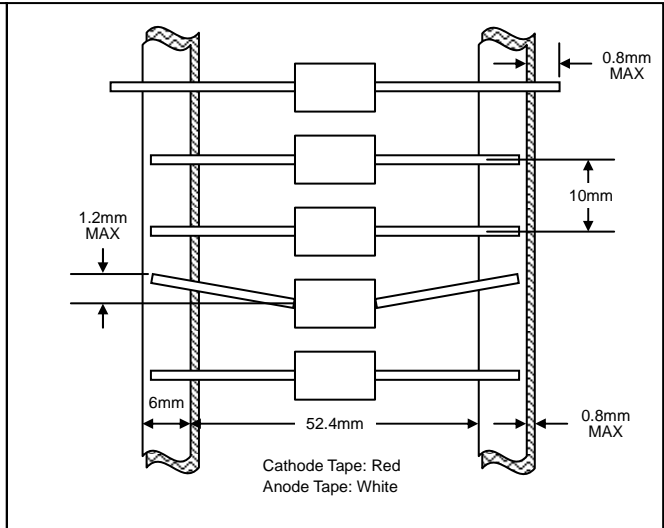
Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Vertical PCB mounting with 12.7mm lead length on 63.5 x 63.5mm copper pad.



MARKING INFORMATION

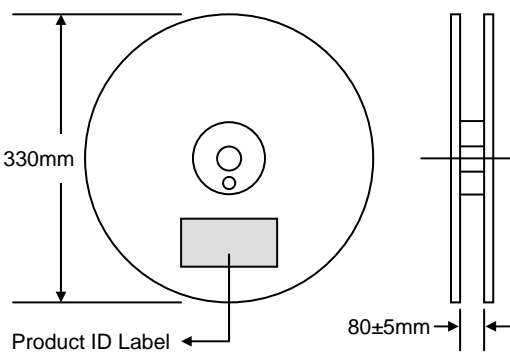


TAPING SPECIFICATIONS



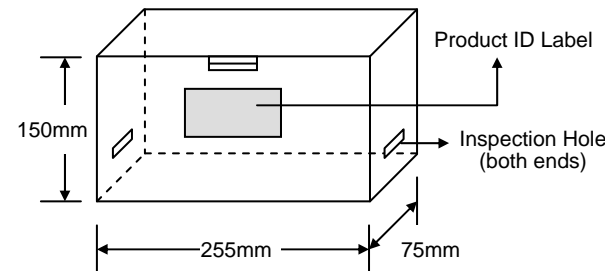
PACKAGING INFORMATION

TAPE & REEL



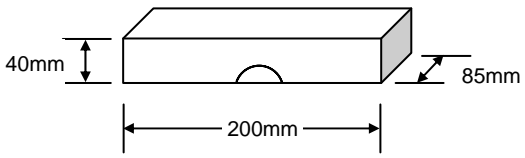
330mm
 Product ID Label
 80±5mm

TAPE & BOX



150mm
 Product ID Label
 Inspection Hole (both ends)
 255mm
 75mm

BULK



40mm
 200mm
 85mm


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.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SB5xx-T3	DO-201AD	1200/Tape & Reel
SB5xx-TB	DO-201AD	1200/Tape & Box
SB5xx	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, SB520-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.

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We power your everyday.