

SINLOON®
POWER SEMICONDUCTOR

SB520 - SB5100



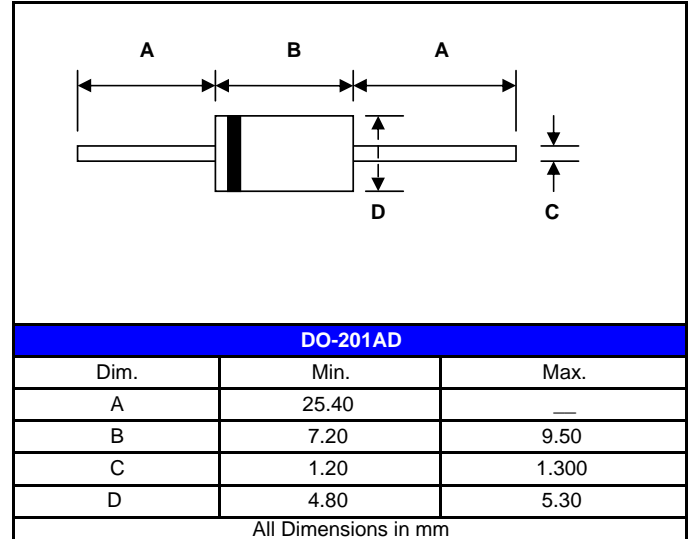
5.0A Schottky Barrier Diode

FEATURE

- ◆ Schottky Barrier Chip
- ◆ Guard Ring Die Construction for Transistor 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: Solder Plated, Solderable per MIL-STD-202, Method 208
- ◆ Polarity: Cathode Band.
- ◆ Marking: Type Number
- ◆ Weight: 1.2 grams (approx.)
- ◆ Mounting Position: Any
- ◆ Lead Free: For RoHS / Lead free Version, Add "LF" suffix to part Number, See page 2.



<http://www.mayloon.com>

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 bt 20%.

Characteristic	Symbol	SB520	SB530	SB540	SB550	SB560	SB580	SB5100	Unit	
Peak Repetitive Reverse Voltage	VRRM									
Working Peak Reverse Voltage	VRWM	20	30	40	50	60	80	100	V	
DC Blocking Voltage	VR									
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	70	V	
Average Rectified Outpot Current @T _L =100°C (Note 1)	IO	5.0								A
Non-Repetitive Peak Forward Surtge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150								A
Forward Voltage @I _F =5.0A	VFM	0.55		0.70		0.85			V	
Peak Reverse Current @TA=25°C	IRM	0.5								mA
At Rated DC Blocking Voltage @TA=100°C		50								
Typical Junction Capacitance (Note 2)	C _j	500				400			pF	
Typical Thermal Resistance (Note 1)	RθJA	10								°C/W
Operating and Storage Temperature Range	TJ, TSTG	-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.



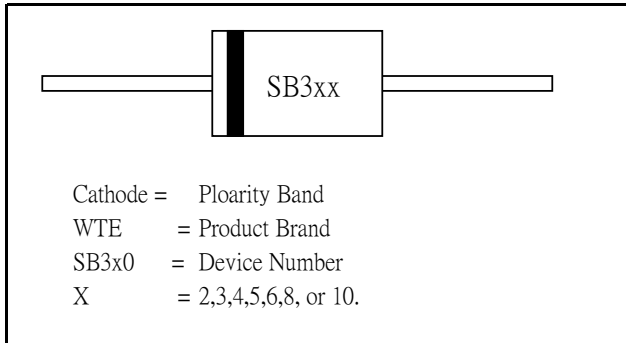
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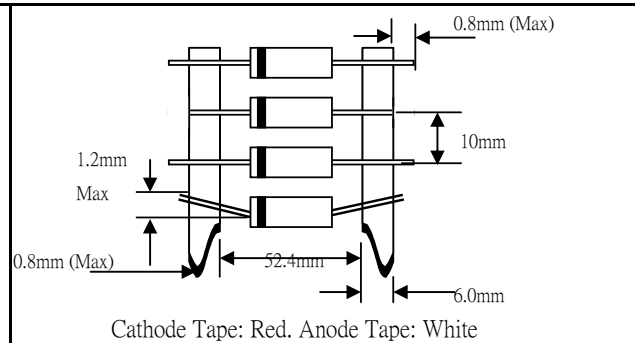


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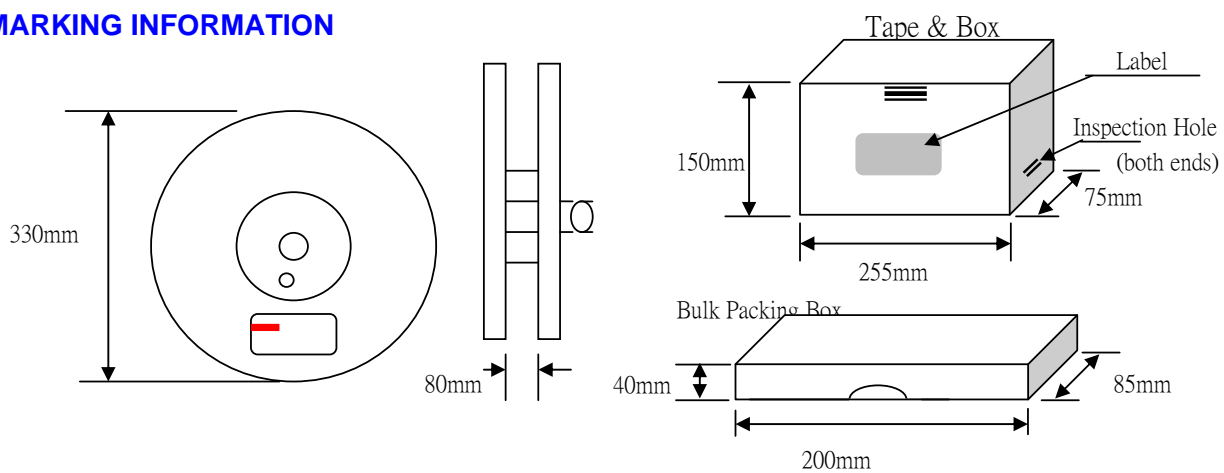
MARKING INFORMATION



TAPING SPECIFICATION



MARKING INFORMATION



Packaging (mm)	Quantity (PCS)	Reel Diameter Box Size (mm)	Carton Size LxWxH (mm)	Quantity (PCS)	Approx Gross Weight (KG)
Tape & Reel	1200	330	370x370x420	6000	10.0
Tape & Box	1200	255x75x150	400x273x415	12000	17.0
Bulk Box	500	200x85x40	459x214x256	12500	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	Product No.	Package Type	Shipping Quantity
SB520-T3	DO-201AD	1200/Tape & Reel	SB560-T3	DO-201AD	1200/Tape & Reel
SB520-TB	DO-201AD	1200/Tape & Box	SB560-TB	DO-201AD	1200/Tape & Box
SB520	DO-201AD	500 Unit/Box	SB560	DO-201AD	500 Unit/Box
SB530-T3	DO-201AD	1200/Tape & Reel	SB580-T3	DO-201AD	1200/Tape & Reel
SB530-TB	DO-201AD	1200/Tape & Box	SB580-TB	DO-201AD	1200/Tape & Box
SB530	DO-201AD	500 Unit/Box	SB580	DO-201AD	500 Unit/Box
SB540-T3	DO-201AD	1200/Tape & Reel	SB5100-T3	DO-201AD	1200/Tape & Reel
SB540-TB	DO-201AD	1200/Tape & Box	SB5100-TB	DO-201AD	1200/Tape & Box
SB540	DO-201AD	500 Unit/Box	SB5100	DO-201AD	500 Unit/Box
SB550-T3	DO-201AD	1200/Tape & Reel			
SB550-TB	DO-201AD	1200/Tape & Box			
SB550	DO-201AD	500 Unit/Box			

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- 1). Products listed in bold are WTE Preferred devices.
2). Shipping quantity given in 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.