



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 Prorection Applications.

#### **MECHANICAL DATA**

Case: DO-201AD, Molded Plastic.

Terminals: Solder Plated, Solderable per MIL-STD-202, Method 208

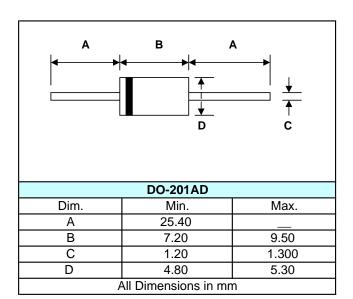
Polarity: Cathode Band.

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 3.



#### MAXIMUM RATINGS AND ELECTRONICAL 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 <sub>L</sub> =1	lo	5.0					Α			
Non-Repetitive Peak Forward Sutge Curr										
8.3ms Single half sine-wave superimpose	IFSM	150					Α			
rated load (JEDEC Method)										
Forward Voltage @I <sub>F</sub> =5	5.0A	VFM		0.55 0.70 0.85		85	V			
Peak Reverse Current @T <sub>A</sub> =	25℃	0.5					mA			
At Rated DC Blocking Voltage @T <sub>A</sub> =	100℃	IRM 50					IIIA			
Typical Junction Capacitance (Note 2)		Cj	500 400			pF				
Typical Thermal Resistance ( Note 1)		Røja	10						°C/W	
Operating and Storage Temperature Range		TJ, TSTG	-65 to +150				$^{\circ}\!\mathbb{C}$			

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.





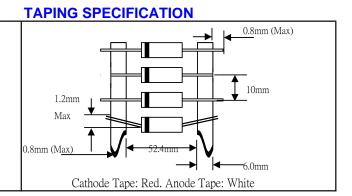
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## **MARKING INFORMATION**

## Cathode = Ploarity Band WTE = Product Brand SB3x0 = Device Number X = 2,3,4,5,6,8, or 10.



## **MARKING INFORMATION** Tape & Box Label Inspection Hole 150mm (both ends) 75mm 330mm 255mm Bulk Packing Bo 80mm→ 40mm **‡** 85mm 200mm

Packaging	Quantity	Reel Daimeter	Carton Size	Quantity	Approx Gross Weight	
(mm)	(PCS)	Box Size (mm)	LxWxH (mm)	(PCS)	(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	

1). Paper reel, white or gray color. Core material: plastic or metal. Note:

2). Components are packed in accordance with EIA standard RS-296-E

### **ORDERING INFORMATION**

ORDERING IN ORMATION							
Product No.	roduct 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					

- Products listed in bold are WTE Preferred devices. 1).
- 2). Shipping quantity given in minimum packing quantity only, for minimum order quantity, please consuit the Sales Department.
- To oder RoHS /Lead Free version ( with Lead Free finish), add "LF" suffix to part number above, for example, SB520-TB-LF. 3).