

SINLOON®

肖特基二極管
Case: DO-201AD

SB520 - SB5100S (20V-100V)
5.0A Schottky Barrier Diode

Feature

- ◆ Schottky Barrier Chip
- ◆ Guard Ring Die Construction for Transient Protection
- ◆ High Current Capability
- ◆ Low Power Loss, High Efficiency
- ◆ High Surge Current Capability
- ◆ For Use un Low Voltage, High Frequency Inverters, Free Wheeling and Polarity Protection Applications.

Figure



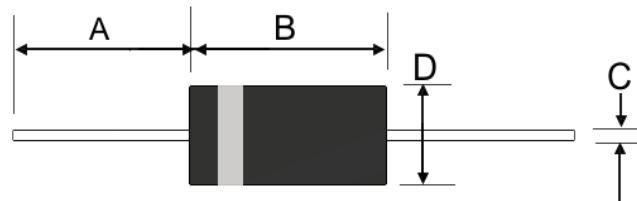
Mechanical Data

- ◆ Case: DO-201AD Moldes Plastic
- ◆ Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- ◆ Polarity: Cathode Band.
- ◆ Weight: 1.2 grams (approx)
- ◆ Mounting Position: Any
- ◆ Mounting : Type Number
- ◆ Lead Free: For **RoHS** / Lead Free Version Add "-LF" Suffix to part Number.

Dimension

Case: DO-201AD (mm)

Dim	Min	Max
A	25.4	---
B	7.2	9.5
C	1.2	1.3
D	4.8	5.3



Marking Information

- Cathode = Device Number
- SR5xx = Device Number
- xx See Page 2
- Polarity = As Marked Body



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

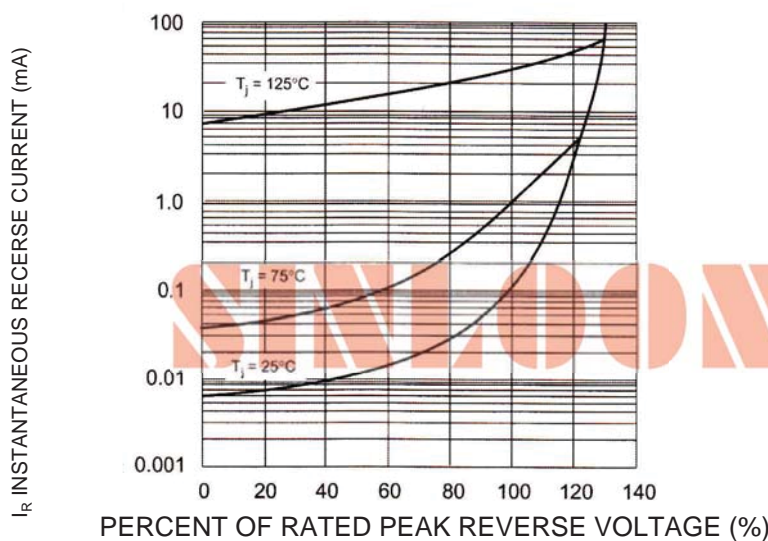


Fig 5 Typical Reverse Characteristics



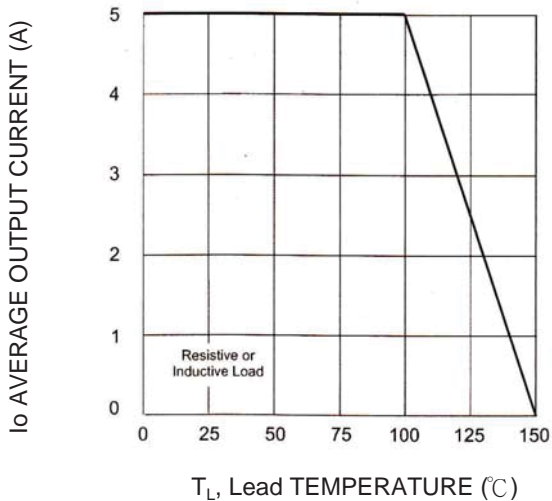
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Single Phase, half wave, 60Hz, resistive or inductive load For capacitive load, derate current by 20%.

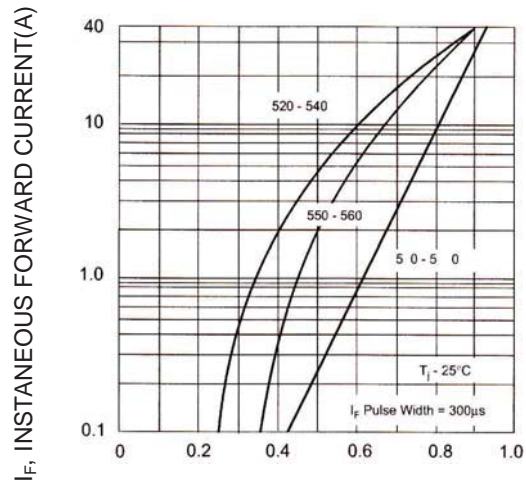
Characteristics	Symbol	SR	SR	SR	SR	SR	SR	SR	Unit
		520	530	540	550	560	580	5100	
Peak Repetitive Reverse Voltage	V_{RRM}								V
Working Peak Reverse Voltage	V_{RWM}	20	30	40	50	60	80	100	
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	V
Average Rectified Output Current @ $T_L=100^\circ\text{C}$ (Note)	I_O	5.0			5.0		5.0		A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150			150		150		A
Forward Voltage @ $I_F=5.0\text{A}$	V_{FM}	0.55			0.7		0.85		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	I_{RM}	50.0			50.0		50.0		mA
At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$									
Typical Junction Capacitance (Note 2)	C_j	500			400		400		pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	10			10		10		$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							$^\circ\text{C}$

Note 1: Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

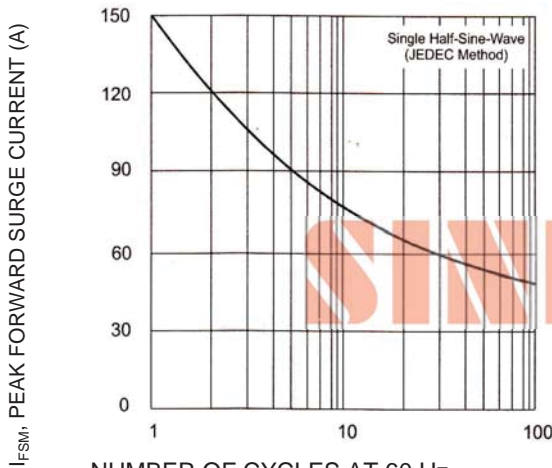
Note 2: Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



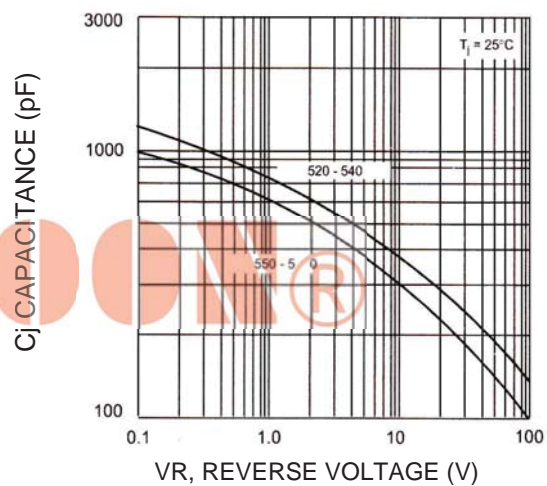
T_L , Lead TEMPERATURE ($^\circ\text{C}$)
Fig-1 Forward and Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig-2 Typical Forward Voltage Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig-3 Peak Forward Surge Current



V_R , REVERSE VOLTAGE (V)
Fig-4 Typical Junction Capacitance

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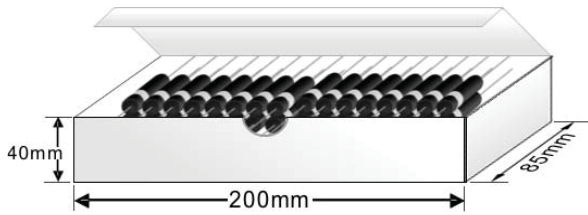
Packaging Information

Unit: mm

Package	Reel Diameter Box Size	Quantity (Pcs)	Carton Size LxWxH (mm)	Quantity (Pcs)	Gross Weight
Tape & Reel	330mm	1,200	370x370x420	6000	10
Tape & Box	255x75x150mm	1,200	400x273x415	12000	17
Bulk	200x85x40mm	500	459x214x256	12500	16

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

Bulk

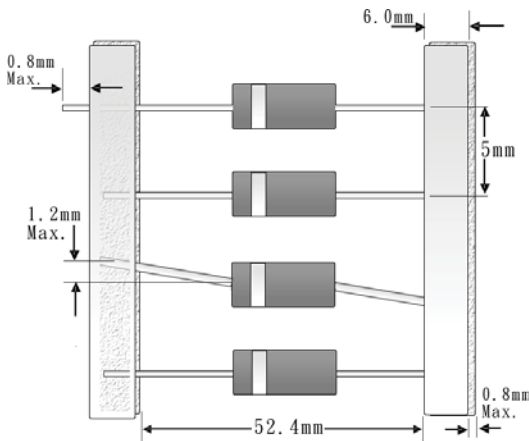


Tape Reel

330mm X 80mm



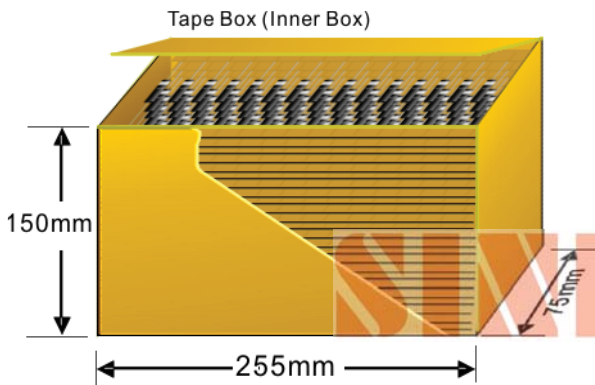
Taping Dimension:



Carton:



Tape & Box



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※Mayloon characteristic parameters of electronic product specification changes or updates without notice to improve。