

**SINLOON®**

肖特基二極管  
Case: TO-220A

**SB10150 - SB10200**  
10A High Voltage Schottky Barrier Rectifier

**Feature**

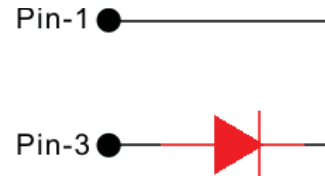
- ◆ Schottky Barrier Chip
- ◆ Guard Ring for Transient Protection
- ◆ Low Forward Voltage Drop
- ◆ Low Reverse leakage Current
- ◆ High Surge Current Capability
- ◆ Plastic Material has UL Flammability Classification 94V-0

Figure



**Mechanical Data**

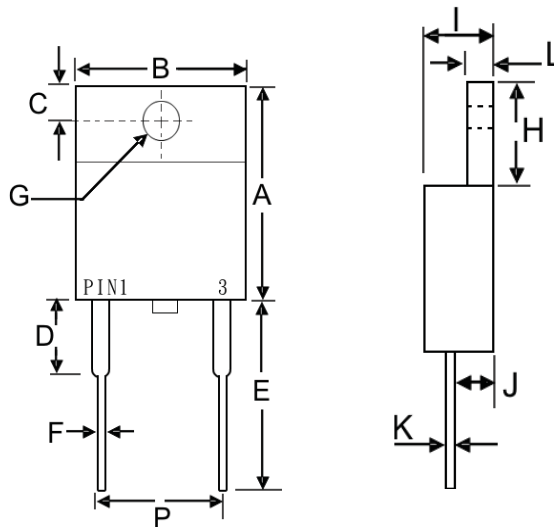
- ◆ Case: TO-220A, Full Moldes Plastic
- ◆ Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- ◆ Polarity: See Diagram
- ◆ Weight: 2.24 grams (approx)
- ◆ Mounting Position: Any
- ◆ Mounting Torque: 11.5 cm·kg (10 in·lbs) max.
- ◆ Lead Free: For **RoHS** / Lead Free Version Add "-LF" Suffix to part Number.



**Dimension**

Case: TO-220A (mm)

Dim.	Min.	Max.
A	13.9	15.9
B	9.8	10.7
C	2.54	3.43
D	3.56	4.56
E	12.7	14.73
F	0.51	0.96
G (Φ)	3.6	4.09
H	5.75	6.85
I	4.16	5.0
J	2.03	2.92
K	0.3	0.65
L	1.14	1.4
P	4.83	5.33



**Marking Information**

- SB10xx = Device Number
- xx =150 (150V)
- =200 (200V)
- Polarity = As Marked Body



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**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%.

Characteristics	Symbol	SB 10150	SB 10200	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$			
Working Peak Reverse Voltage	$V_{RWM}$	150	200	V
DC Blocking Voltage	$V_R$			
RMS Reverse Voltage	$V_{R(RMS)}$	105	140	V
Average Rectified Output Current @ $T_L=95^\circ\text{C}$	$I_O$	10	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150	150	A
Forward Voltage @ $I_F=10\text{A}$	$V_{FM}$	0.92	0.92	V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	$I_{RM}$	0.5	0.5	mA
At Rated DC Blocking Vol. @ $T_A=100^\circ\text{C}$		50	50	
Typical Junction Capacitance (Note 1)	$C_j$	700	700	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0	2.0	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150		$^\circ\text{C}$

Note 1: Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Note 2: Thermal resistance junction to case mounted on heatsink.

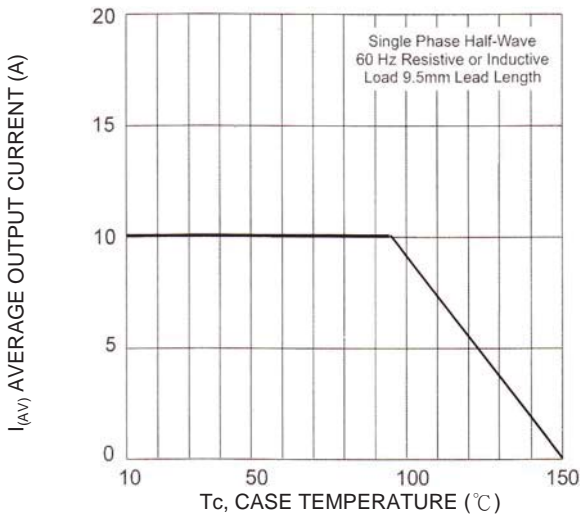


Fig-1 Forward and Current Derating Curve

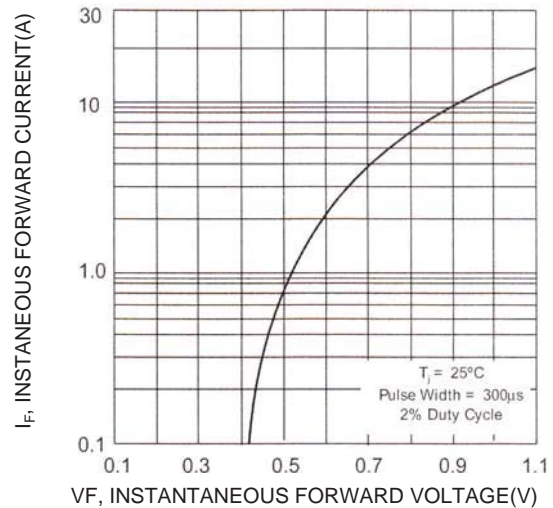


Fig-2 Typical Forward Voltage Characteristics

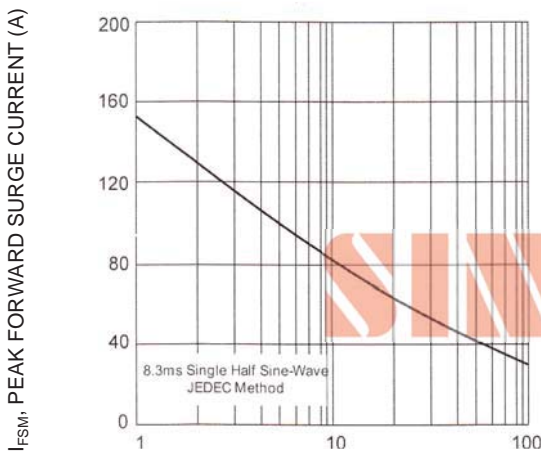


Fig-3 Peak Forward Surge Current

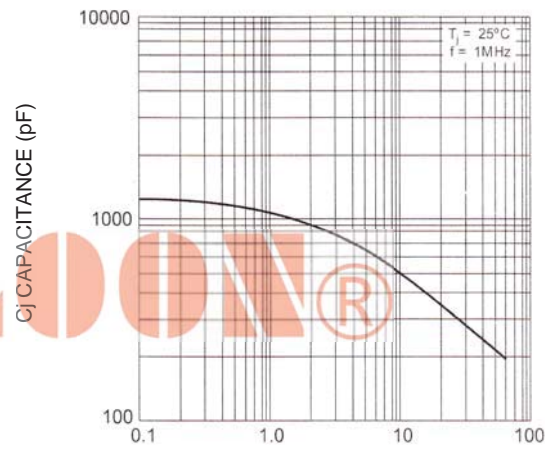


Fig-4 Typical Junction Capacitance

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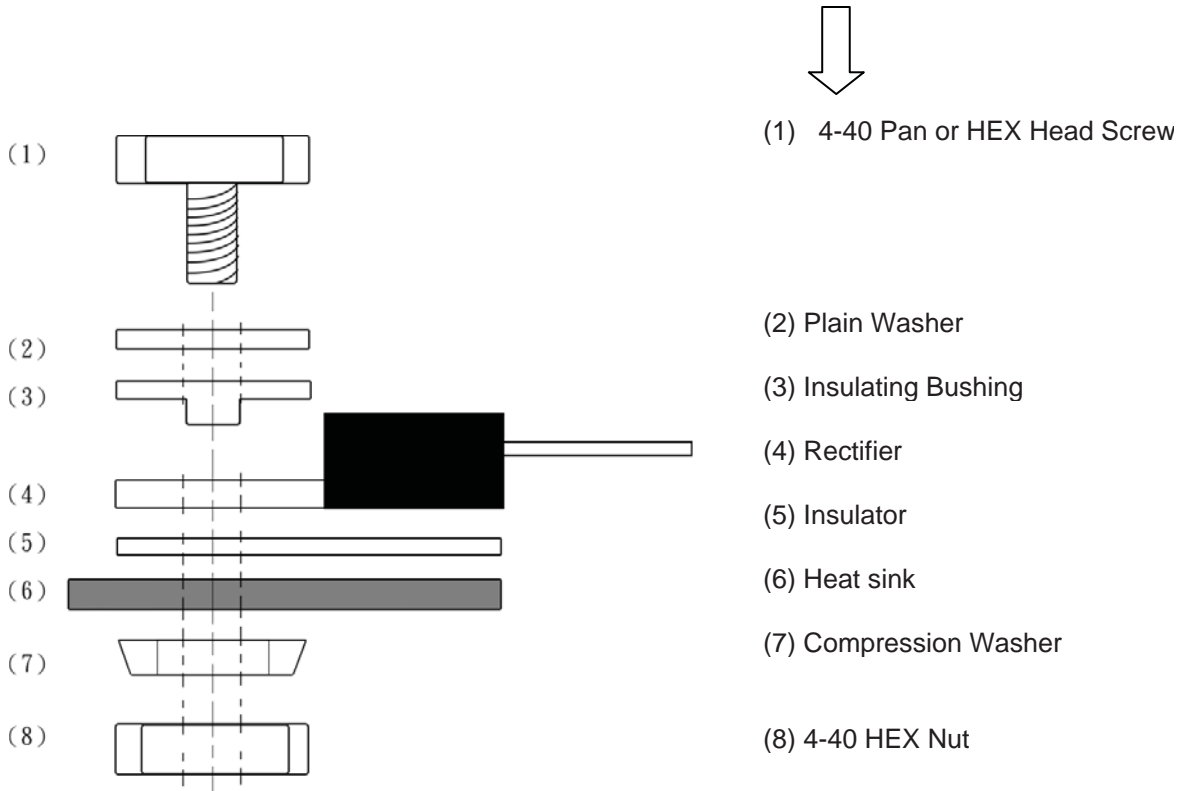
**Packaging Information**

Tube Size LxWxH (mm)	Quantity (Pcs)	Inner Box Size LxWxH (mm)	Quantity (Pcs)	Carton Size LxWxH (mm)	Quantity (Pcs)	Gross Weight
525 x 31 x 6	50	555x145x95	2000	572x306x218	8000	19.0kg

Note: Anti-static tube. Water clear color.

◆ Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

**Recommended Screw Mount Arrangement**



◆ Recommended isolated mounting when screw is at heat sink potential, 4-40 hardware is used.

◆ Screw should not be tightened with any type of air-forced torque or equipment that may cause high impact on device package. The insulating bushing inside the mounting hole will insure the screw threads do not contact the metal base.

◆ The interface should apply a layer of thermal grease or a highly conductive thermal pad for better heat dissipation



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

