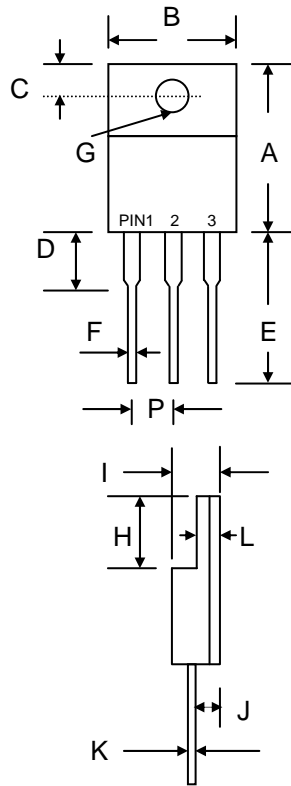


Features

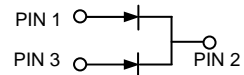
- Schottky Barrier Chip
- Guard Ring for Transient Protection
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Current Capability
- Epoxy Meets UL 94V-0 Classification
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes

Mechanical Data

- Case: ITO-220, Full Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 1.9 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 0.6 N.m Max.
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



ITO-220		
Dim	Min	Max
A	14.60	15.40
B	9.70	10.30
C	2.55	2.85
D	—	4.16
E	13.00	13.80
F	0.50	0.75
G	3.00 Ø	3.50 Ø
H	6.30	6.90
I	4.20	4.80
J	2.50	2.90
K	0.50	0.75
L	2.60	3.30
P	2.29	2.79
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	SB10150FCT	SB10200FCT	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	105	140	V
Average Rectified Output Current @ $T_C = 100^\circ\text{C}$	Total Device Per Diode I_O	10 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 per diode @ $I_F = 5.0\text{A}$	V_{FM}	0.92		V
Peak Reverse Current At Rated DC Blocking Voltage	@ $T_J = 25^\circ\text{C}$ @ $T_J = 100^\circ\text{C}$ I_{RM}	0.2 10		mA
Typical Junction Capacitance (Note 1)	C_J	200		pF
Thermal Resistance Junction to Ambient per diode Thermal Resistance Junction to Case per diode	R_{JA} R_{JC}	62 4.0		$^\circ\text{C/W}$
RMS Isolation Voltage Terminals to Case, $t = 1$ min	V_{ISO}	1500		V
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150		$^\circ\text{C}$

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

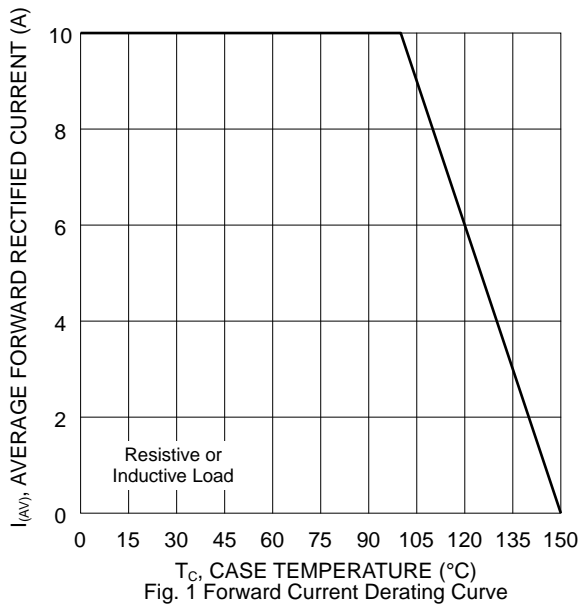


Fig. 1 Forward Current Derating Curve

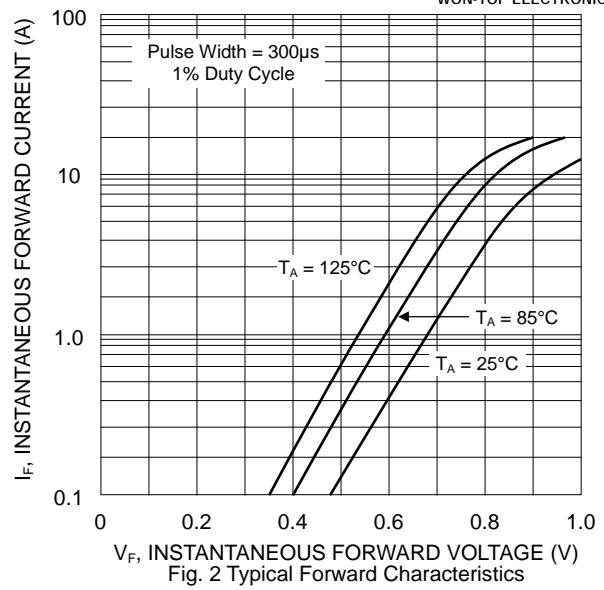


Fig. 2 Typical Forward Characteristics

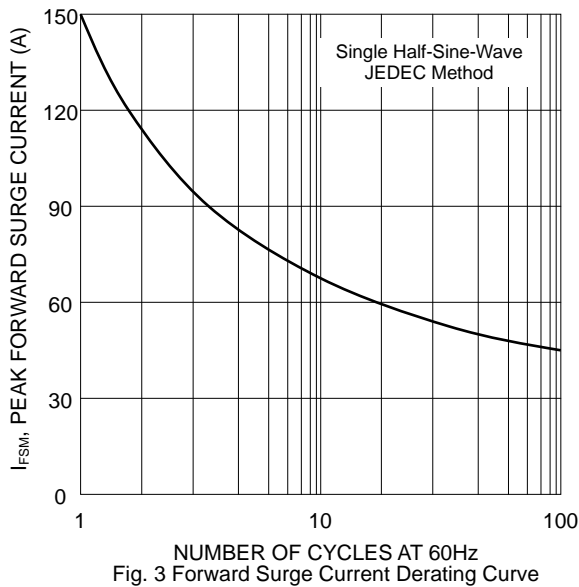


Fig. 3 Forward Surge Current Derating Curve

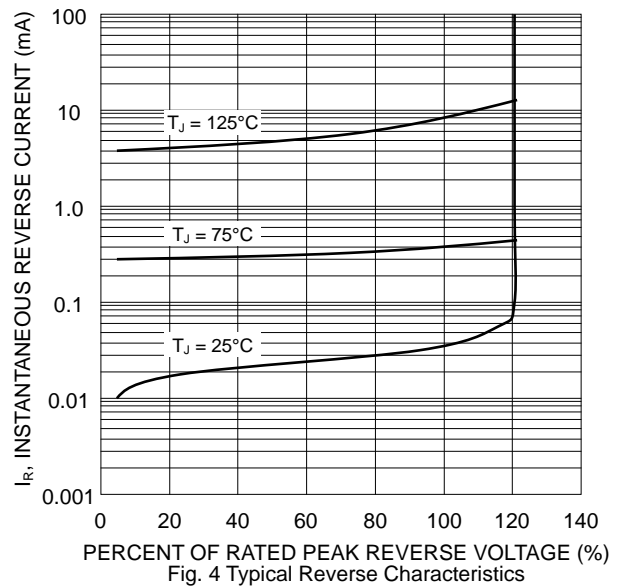


Fig. 4 Typical Reverse Characteristics

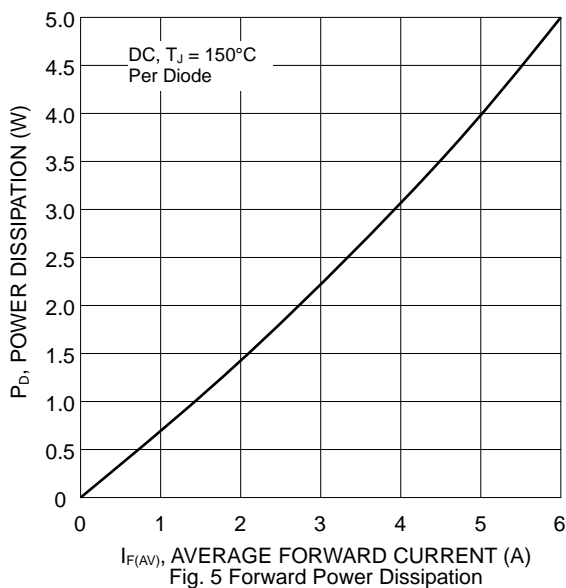


Fig. 5 Forward Power Dissipation

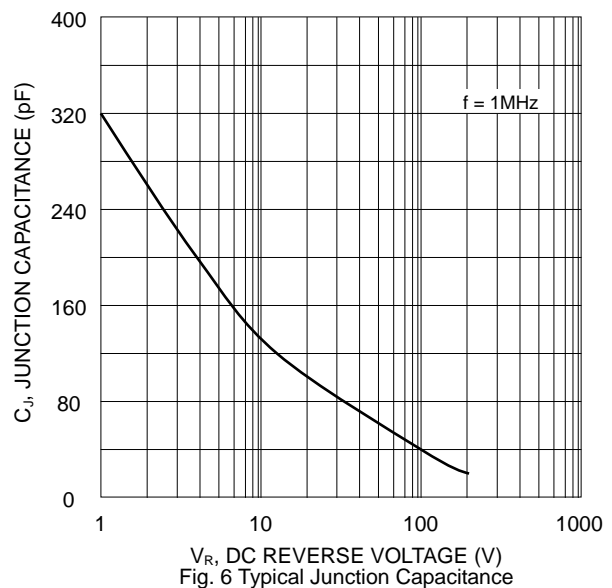
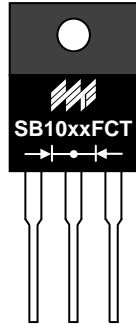


Fig. 6 Typical Junction Capacitance

MARKING INFORMATION



SB10xxFCT = Device Number
 xx = 150 or 200
 Polarity = As Marked on Body

PACKAGING INFORMATION

BULK

Tube Size L x W x H (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
525 x 31 x 6	50	555 x 145 x 95	2,000	572 x 306 x 218	8,000	19.0

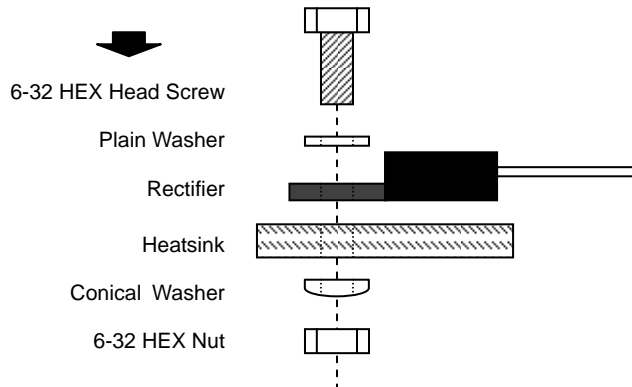
Note: 1. Anti-static tube, water clear color.

RECOMMENDED SCREW MOUNTING ARRANGEMENT

The full molded plastic package affords a major reduction of hardware as compared to a standard TO-220 package. However, precautions should be made in mounting procedure.

A conical washer should be used to apply proper force to the device. Screw should not be tightened with any type of air-forced torque or equipment that may cause crack on device package.

A layer of thermal grease or thermal pad in the interface will be considerably helpful for heat dissipation.



ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SB10150FCT	ITO-220	50 Units/Tube
SB10200FCT	ITO-220	50 Units/Tube

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add “-LF” suffix to part number above. For example, SB10150FCT-LF.**

WON-TOP ELECTRONICS and  are registered trademarks of Won-Top Electronics Co., Ltd (WTE). WTE has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

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.

Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road,
Chine Chen Dist., Kaohsiung 806, Taiwan
Phone: 886-7-822-5408 or 886-7-822-5410
Fax: 886-7-822-5417
Email: sales@wontop.com
Internet: <http://www.wontop.com>

We power your everyday.