

SB1020CT – SB10100CT 👫 🔁

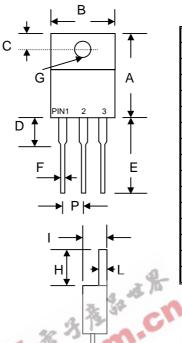
10A DUAL SCHOTTKY BARRIER RECTIFIER

Features

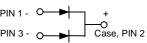
- Schottky Barrier Chip
- Guard Ring for Transient Protection
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

Mechanical Data

- Case: TO-220, Molded 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, See Page 4



TO-220					
Dim	Min	Max			
Α	13.90	15.90			
В	9.80	10.70			
С	2.54	3.43			
D	3.56	4.56			
Е	12.70	14.73			
F	0.51	0.96			
G	3.55 Ø	4.09 Ø			
Н	5.75	6.85			
I	4.16	5.00			
J	2.03	2.92			
К	0.30	0.65			
L	1.14	1.40			
Р	2.29 2.79				
All Dimensions in mm					

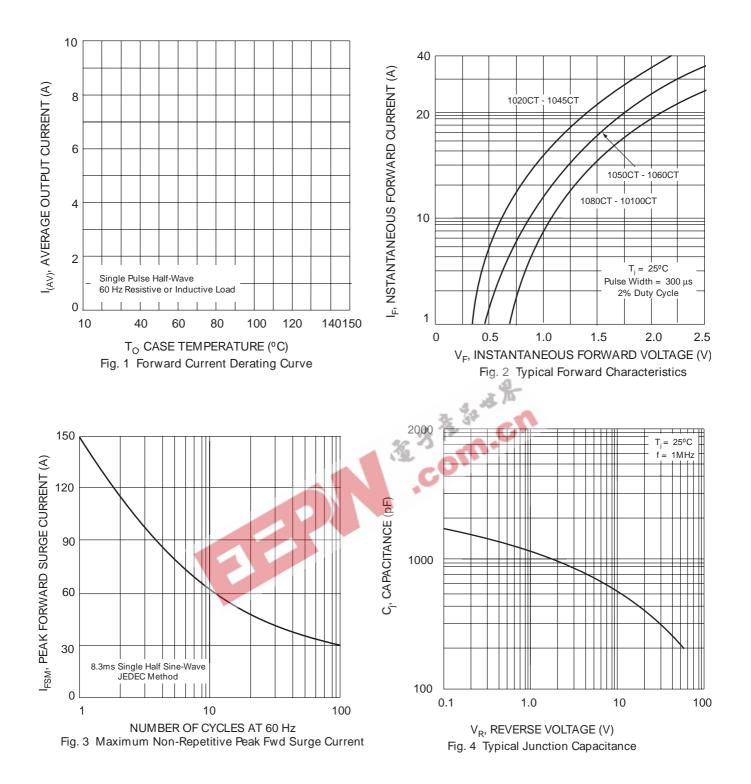


Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

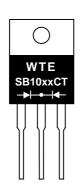
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SB 1020CT	SB 1030CT	SB 1040CT	SB 1045CT	SB 1050CT	SB 1060CT	SB 1080CT	SB 10100CT	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	20	30	40	45	50	60	80	100	V
RMS Reverse Voltage	VR(RMS)	14	21	28	32	35	42	56	70	V
Average Rectified Output Current @T _c = 95°C	ю	10							А	
Non-Repetitive Peak Forward Surge 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.	75	0.	85	V
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	I RM	0.5 50					mA			
Typical Junction Capacitance (Note 1)	Cj	700							pF	
Operating and Storage Temperature Range	Тj, Tsтg	-65 to +150							°C	

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



MARKING INFORMATION



WTE	= Manufacturer's Logo			
SB10xxCT	= Device Number			
xx	= 20, 30, 40, 45, 50, 60, 80 or 100			
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	57 2 x 306 x 218	8,000	19.0	
Note: 1. Anti-static tube, water clear color.							

RECOMMENDED SCREW MOUNTING ARRANGEMENT

Recommended isolated mounting when screw is at heatsink potential. 4-40 hardware is used.	4-40 PAN or HEX Head Screw	
	Plain Washer	
Screw should not be tightened with any type of air-forced torque or equipment	Insulating Bushing	
that may cause high impact on device package. The insulating bushing inside	Rectifier	
the mounting hole will insure the screw	Insulator	
threads do not contact the metal base.	Heatsink	
The interface should apply a layer of thermal grease or a highly conductive	Compression Washer	
thermal pad for better heat dissipation.	4-40 HEX Nut	

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SB1020CT	TO-220	50 Units/Tube
SB1030CT	TO-220	50 Units/Tube
SB1040CT	TO-220	50 Units/Tube
SB1045CT	TO-220	50 Units/Tube
SB1050CT	TO-220	50 Units/Tube
SB1060CT	TO-220	50 Units/Tube
SB1080CT	TO-220	50 Units/Tube
SB10100CT	TO-220	50 Units/Tube

1. Shipping quantity given is for minimum packing quantity only. For minimum

order quantity, please consult the Sales Department. To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SB1020CT-LF. 2.



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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, 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

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