

# SB2520FCT – SB25100FCT

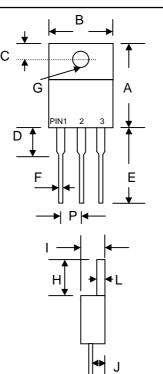
# 25A DUAL SCHOTTKY BARRIER RECTIFIER

#### Features

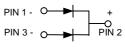
- Schottky Barrier Chip
- Guard Ring for Transient Protection
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

#### **Mechanical Data**

- Case: ITO-220, Full 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



ITO-220						
Dim	Min	Мах				
Α	14.60	15.40				
В	9.70	10.30				
С	2.55	2.85				
D	3.56	4.16				
Е	13.00	13.80				
F	0.30	0.90				
G	3.00 Ø	3.50 Ø				
н	6.30	6.90				
I	4.20	4.80				
J	2.50	2.90				
к	0.36	0.80				
L	2.90	3.30				
Р	2.29	2.79				
All Dimensions in mm						

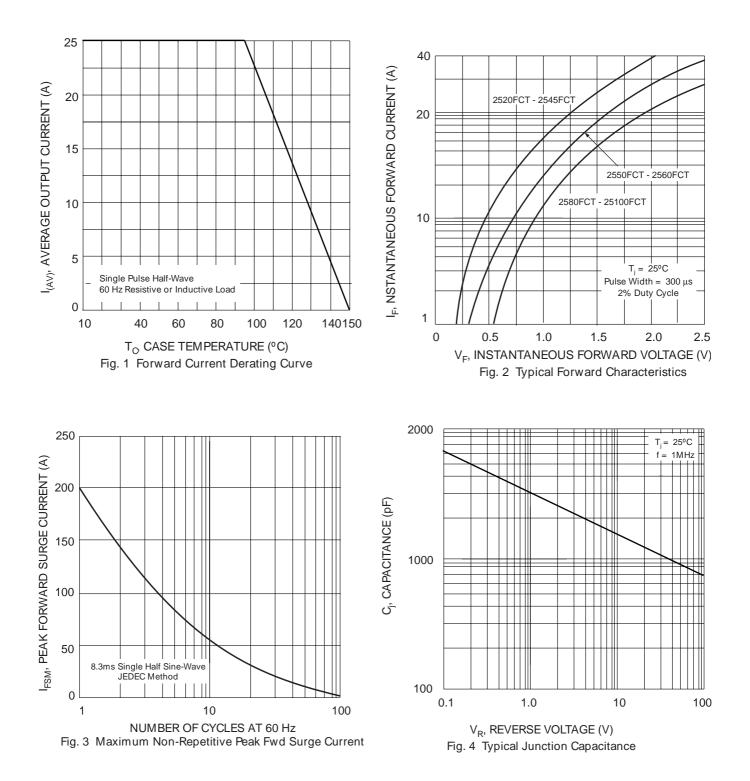


# Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

Characteristic	Symbol	SB 2520FCT	SB 2530FCT	SB 2540FCT	SB 2545FCT	SB 2550FCT	SB 2560FCT	SB 2580FCT	SB 25100FCT	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 <sub>c</sub> = 95°C	ю				2	5				А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	200						A		
Forward Voltage @I <sub>F</sub> = 12.5A	Vfm	0.55 0.75 0.85				85	V			
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	Iгм	0.5 100					mA			
Typical Junction Capacitance (Note 1)	Cj	1100							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
SB25xxFCT	= Device Number
xx	= 20, 30, 40, 45, 50, 60, 80 or 100
Polarity	= As Marked on Body

# PACKAGING INFORMATION

### BULK

Tube Size	Quantity	Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	(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.	6-32 HEX Head Screw Plain Washer	
A conical washer should be used to apply proper force to the device. Screw should	Rectifier	
not be tightened with any type of air-forced torque or equipment that may cause crack	Heatsink	
on device package.	Conical Washer	
A layer of thermal grease or thermal pad in the interface will be considerably helpful for heat dissipation.	6-32 HEX Nut	

#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
SB2520FCT	ITO-220	50 Units/Tube
SB2530FCT	ITO-220	50 Units/Tube
SB2540FCT	ITO-220	50 Units/Tube
SB2545FCT	ITO-220	50 Units/Tube
SB2550FCT	ITO-220	50 Units/Tube
SB2560FCT	ITO-220	50 Units/Tube
SB2580FCT	ITO-220	50 Units/Tube
SB25100FCT	ITO-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, SB2520FCT-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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