

SB620FCT - SB660FCT



6.0A 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

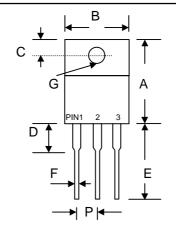
Polarity: See Diagram

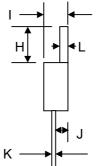
Weight: 2.24 grams (approx.)

Mounting Position: Any

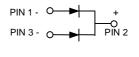
Mounting Torque: 11.5 cm-kg (10 in-lbs) Max.

Lead Free: For RoHS / Lead Free Version,
 Add "-LF" Suffix to Part Number, See Page 4





ITO-220				
Dim	Min	Max		
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		
K	0.36	0.80		
L	2.90	3.30		
Р	2.29	2.79		
All Dimensions in mm				

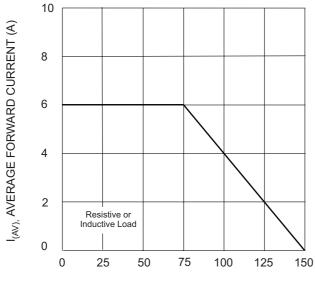


Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

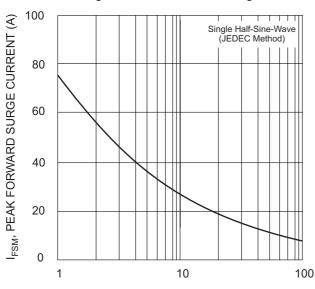
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SB620FCT	SB630FCT	SB640FCT	SB650FCT	SB660FCT	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	V
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	V
Average Rectified Output Current @T _C = 75°C	lo			6.0			Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	75			Α		
Forward Voltage @I _F = 3.0A	VFM		0.55		0.70		V
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	IRM	0.2 15			mA		
Typical Junction Capacitance (Note 1)	Cj	400				pF	
Operating and Storage Temperature Range	Tj, Tstg	-65 to +150					°C

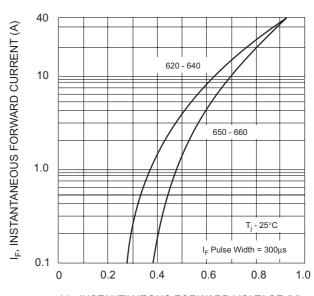
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



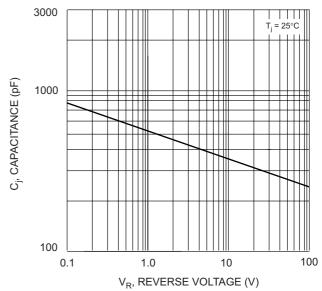
 ${\rm T_{\rm C}}$ CASE TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve



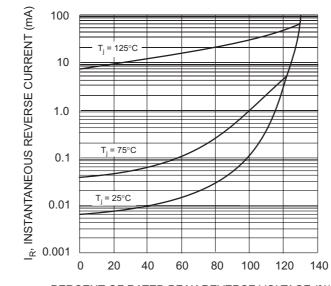
NUMBER OF CYCLES AT 60Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



 $\rm V_F$, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



urge Current Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics

MARKING INFORMATION



WTE = Manufacturer's Logo
SB6x0FCT = Device Number
x = 2, 3, 4, 5 or 6
Polarity = As Marked on Body

PACKAGING INFORMATION

BULK

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

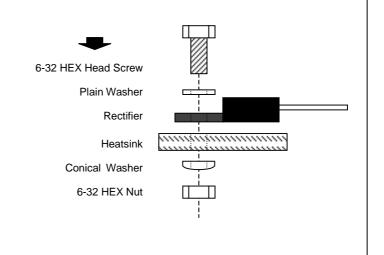
Note: 1. Anti-static tube, water clear color.

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
SB620FCT	ITO-220	50 Units/Tube
SB630FCT	ITO-220	50 Units/Tube
SB640FCT	ITO-220	50 Units/Tube
SB650FCT	ITO-220	50 Units/Tube
SB660FCT	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, SB620FCT-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.

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