



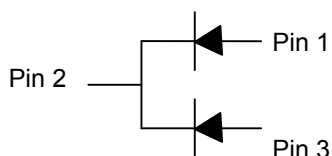
SINLOON®
POWER SEMICONDUCTORS

SB1620FCT - SB16100FCT

16A Dual 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



MECHANICAL DATA

- ◆ Cass: ITO-220, Full Molded Plastic.
- ◆ Terminals: Plated Leads Solder able 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 Data.

ITO-220		
Dim.	Min.	Max.
A	14.60	15.40
B	9.70	10.30
C	2.55	2.85
D	3.560	4.160
E	13.00	13.80
F	0.30	0.90
G	Φ3.00	Φ3.50
H	6.300	6.900
I	4.200	4.800
J	2.500	2.900
K	0.360	0.800
L	2.900	3.300
P	2.290	2.790

All Dimensions in mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS @TA = 25°C unless otherwise specified

Characteristic	Symbol	SB1620	SB1630	SB1640	SB1640	SB1650	SB1660	SB1680	SB16100	Unit
		FCT	FCT	FCT	FCT	FCT	FCT	FCT	FCT	
Peak Repetitive Reverse Voltage	VRRM									V
Working Peak Reverse Voltage	VRWM	20	30	40	45	50	60	80	100	V
DC Blocking Voltage	VR									V
RMS Reverse Voltage	VR(RMS)	14	21	28	32	35	42	56	70	V
Average Rectified Outpot Current @Tc=105°C	IO	16.0				16.0				A
Non-Repetitive Peak Forward Surtge Current	IFSM	150				150				A
8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)										
Forward Voltage	VFM	@IF=8.0A 0.55				0.75	0.85		V	
Peak Reverse Current	IRM	@TA=25°C 0.5				100				uA
At Rated DC Blocking Voltage		@TA=125°C	100				700			
Reverse Recovery Time (Note 2)	Cj	700								pF
Storage Temperature Range	Tj, TSTG	-55 to +150								°C

Note: 1). Measure at 1.0 MHz and Applied reverse voltage of 4.0V.DC.



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DATA CURVE

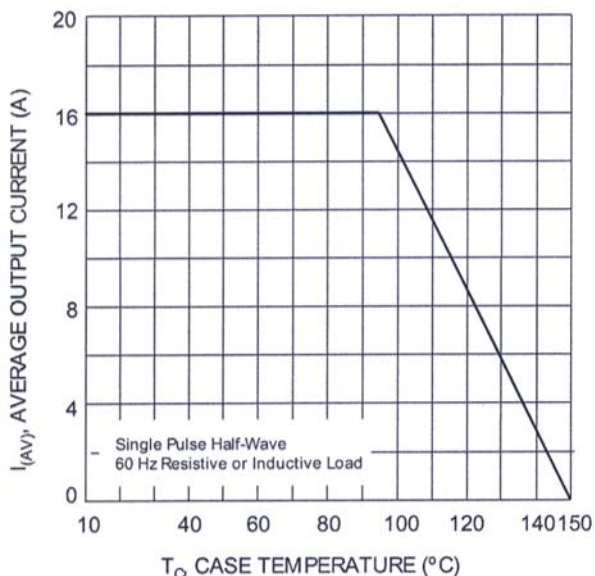


Fig. 1 Forward Current Derating Curve

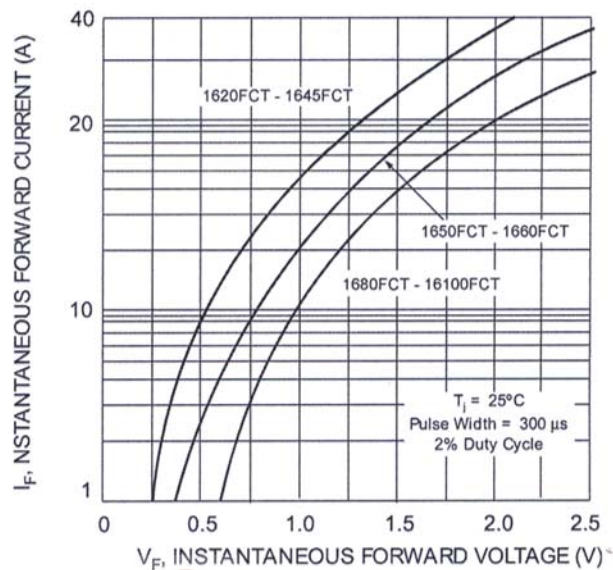


Fig. 2 Typical Forward Characteristics

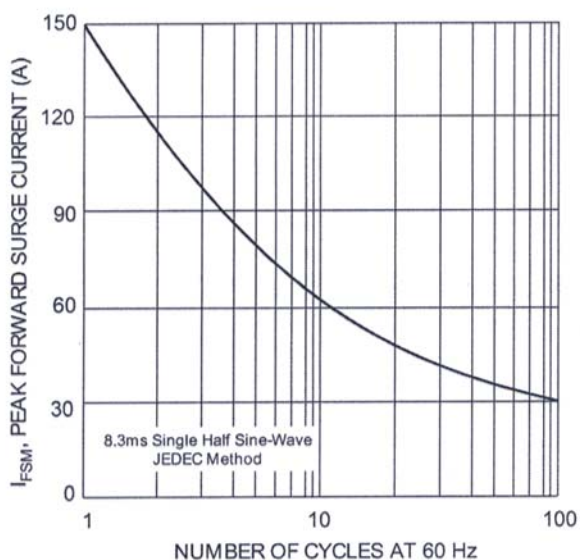


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

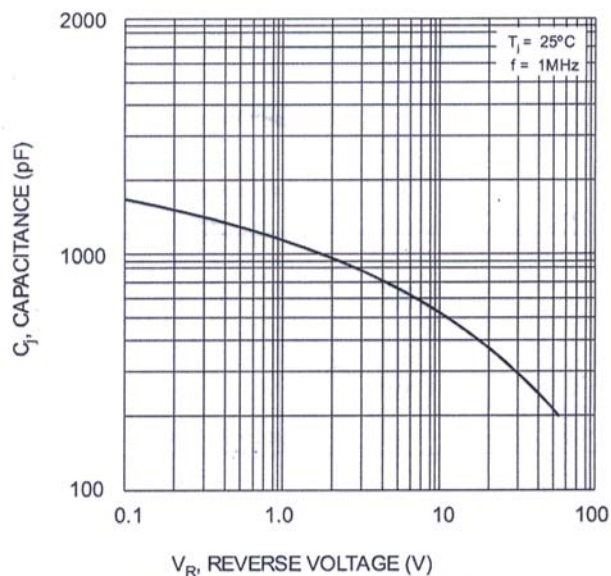


Fig. 4 Typical Junction Capacitance

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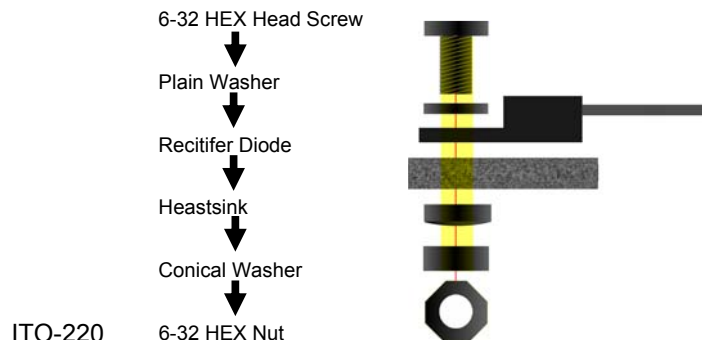
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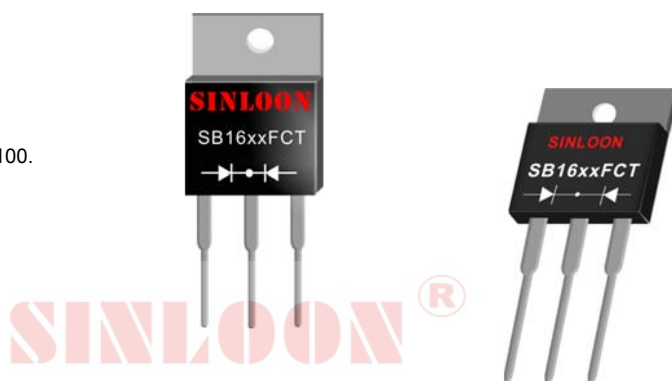
RECOMMENDED SCREW MOUNTING ARRANGEMENT

- ◆ 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



MARKING INFORMATION

XXX	=	Marking Logo
SB16xxFCT	=	Device Number
x	=	20,30,40,45,50,60,60,100.
Polarity	=	As Marked on body.



PACKAGING INFORMATION

Tube Size	Quantity	Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight
LxWXH (mm)	(Pcs)	LxWXH (mm)	(Pcs)	LxWXH (mm)	(Pcs)	(Kg)
525x31x6	50	555x145x95	2000	572x306x218	8000	19

PACKAGING INFORMATION

Product No.	Package Type	Carton Quantity
SB1620FCT	ITO-220	50 Units/Tube
SB1630FCT	ITO-220	50 Units/Tube
SB1640FCT	ITO-220	50 Units/Tube
SB1645FCT	ITO-220	50 Units/Tube
SB1650FCT	ITO-220	50 Units/Tube
SB1660FCT	ITO-220	50 Units/Tube
SB1680FCT	ITO-220	50 Units/Tube
SB16100FCT	ITO-220	50 Units/Tube

- 1). Ordering Information
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 uimper above. For example.
SB1620FCT-LF