

**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - 30 to 60 Volts  
FORWARD CURRENT - 16 Amperes

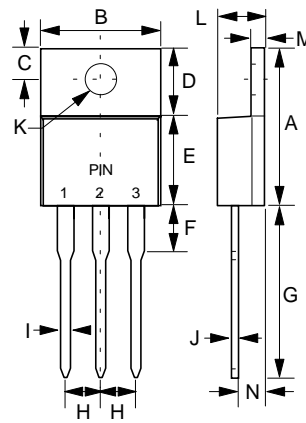
**FEATURES**

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

**MECHANICAL DATA**

- Case : TO-220AB molded plastic
- Polarity : As marked on the body
- Weight : 0.08 ounces, 2.24 grams
- Mounting position : Any

**TO-220AB**



TO-220AB		
DIM.	MIN.	MAX.
A	14.22	15.88
B	9.65	10.67
C	2.54	3.43
D	5.84	6.86
E	8.26	9.28
F	-	6.35
G	12.70	14.73
H	2.29	2.79
I	0.51	1.14
J	0.30	0.64
K	3.53 $\varnothing$	4.09 $\varnothing$
L	3.56	4.83
M	1.14	1.40
N	2.03	2.92

All Dimensions in millimeter

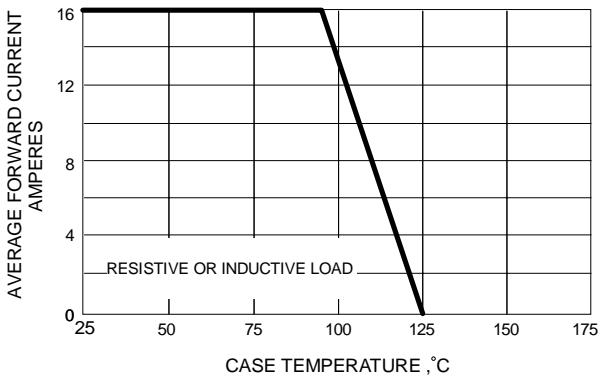
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60HZ, resistive or inductive load.  
For capacitive load, derate current by 20%

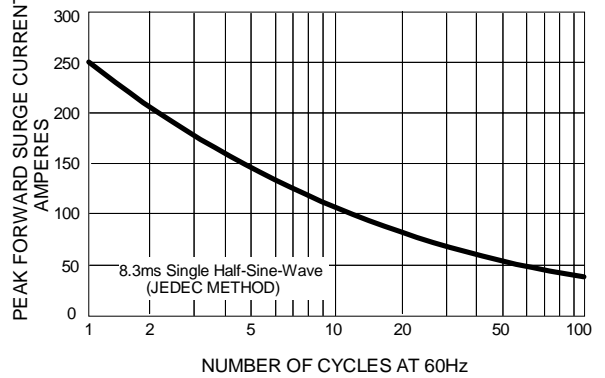
CHARACTERISTICS	SYMBOL	SBL 1630CT	SBL 1635CT	SBL 1640CT	SBL 1645CT	SBL 1650CT	SBL 1660CT	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	30	35	40	45	50	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	21	24.5	28	31.5	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current (See Fig.1) @T <sub>C</sub> =95°C	I <sub>(AV)</sub>	16						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I <sub>FSM</sub>	250						A
Maximum Forward Voltage at 8A DC (Note 1)	V <sub>F</sub>	0.55				0.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	I <sub>R</sub>	0.5				50		mA
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	350						pF
Typical Thermal Resistance (Note 3)	R <sub>θJC</sub>	2.5						°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125						°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150						°C

NOTES : 1. 300us Pulse Width, 2% Duty Cycle.  
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
3. Thermal Resistance Junction to Case.

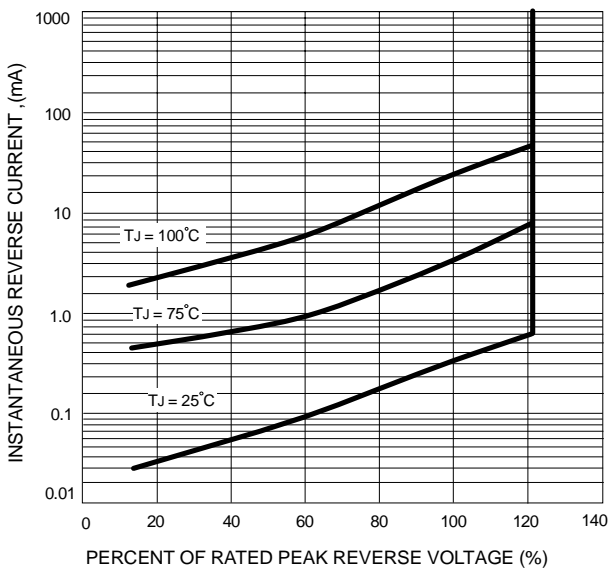
**FIG.1 - FORWARD CURRENT DERATING CURVE**



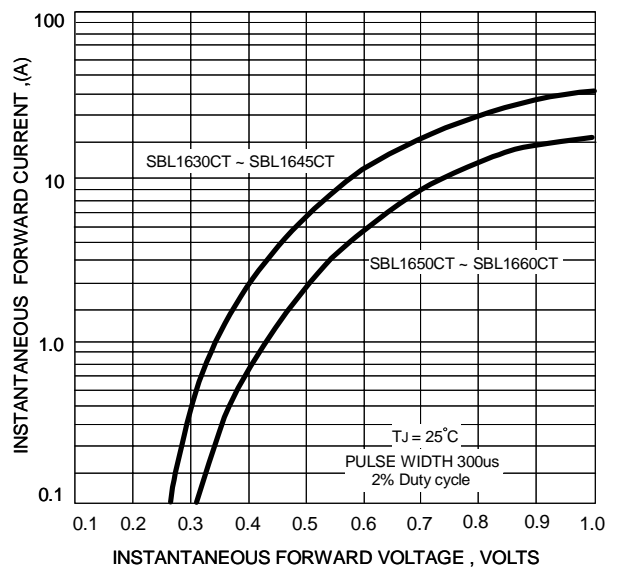
**FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3 - TYPICAL REVERSE CHARACTERISTICS**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL JUNCTION CAPACITANCE**

