

Schottky Barrier Rectifier

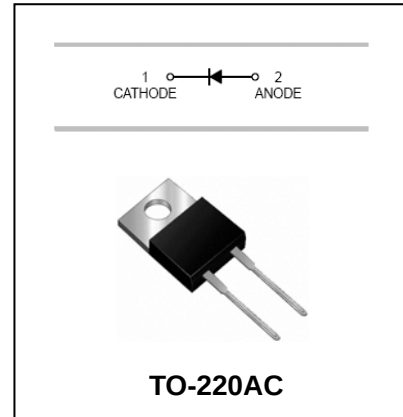
SBL830---SBL8100

FEATURES

- Mwtal-Semiconductor Junction with Guardring.
- Epitaxial Construction.
- Low Forward Voltage Drop,Low Switching Losses.
- High Surge Capability.
- For Use in Low Voltage,High Frequency Inverters Free Wheeling,and Polarity Protection Applications.
- The Plastic Material Carries U/L Recognition 94V-0.



Lead-free



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	SBL 830	SBL 835	SBL 840	SBL 845	SBL 850	SBL 860	SBL 880	SBL 8100	Unit
V_{RRM}	Recurrent Peak Reverse Voltage	30	35	40	45	50	60	80	100	V
V_{RMS}	RMS Reverse Voltage	21	25	28	32	35	42	56	70	V
V_{DC}	DC Blocking Voltage	30	35	40	45	50	60	80	100	V
$I_{F(AV)}$	Average Forward Total Device Rectified Current @ $T_A=100^{\circ}C$	8.0								A
I_{FSM}	Forward Surge Current 8.3ms Single Half-Sine-Wave Superimosed on Rated Load	200								A
$R_{\theta JC}$	Typical Thermal Resistance (Note1)	6.9								$^{\circ}C/W$
T_j, T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150								$^{\circ}C$

Note1: Thermal Resistance Junction to Case

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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	SBL830- SBL845	SBL850- SBL860	SBL880- SBL8100	UNIT
			MAX			
Reverse Current	I _R	V _R =V _{RRM} , T _A =25°C V _R =V _{RRM} , T _A =100°C	0.5 50			mA
Forward Voltage	V _F	I _F =8A	0.60	0.70	0.85	V

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

FIG.1 – PEAK FORWARD SURGE CURRENT

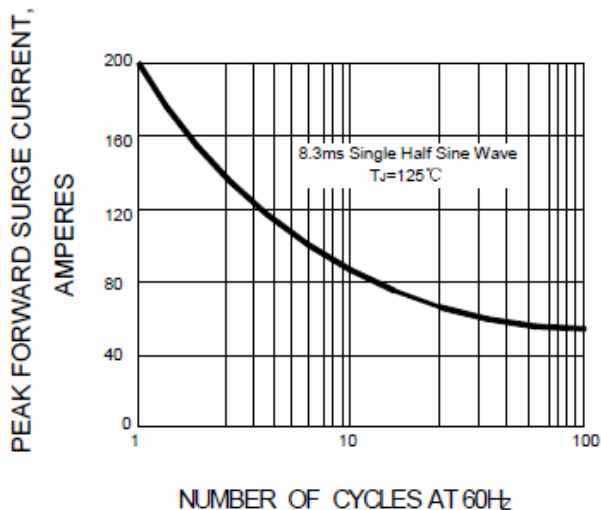


FIG.2 -- FORWARD DERATING CURVE

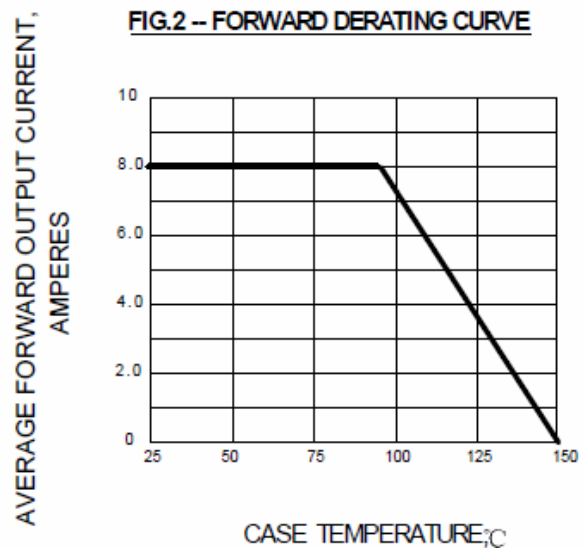


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

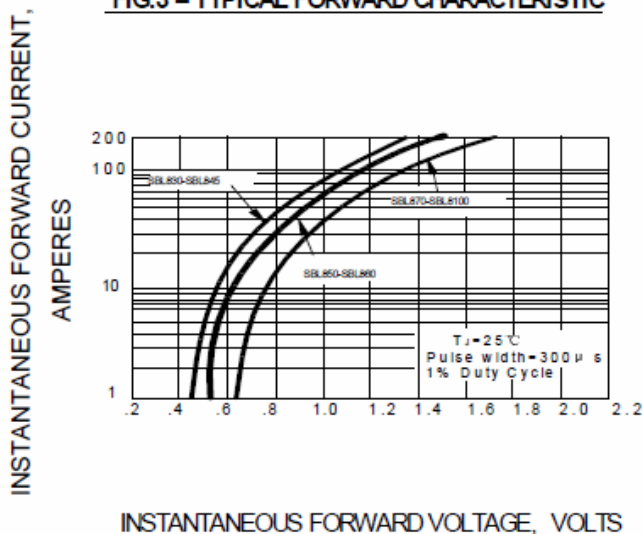
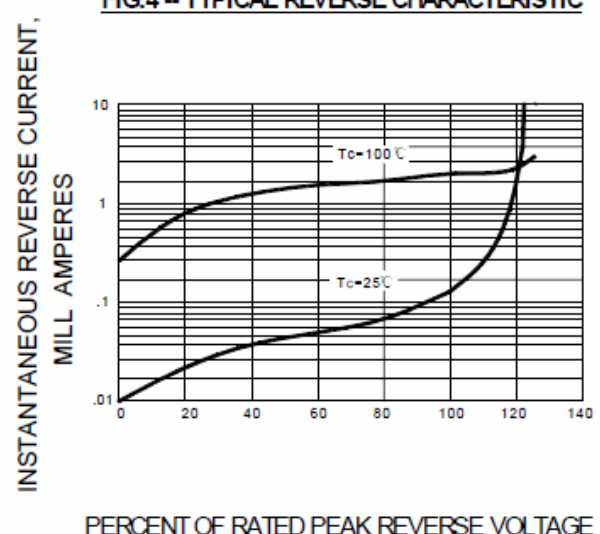


FIG.4 -- TYPICAL REVERSE CHARACTERISTIC





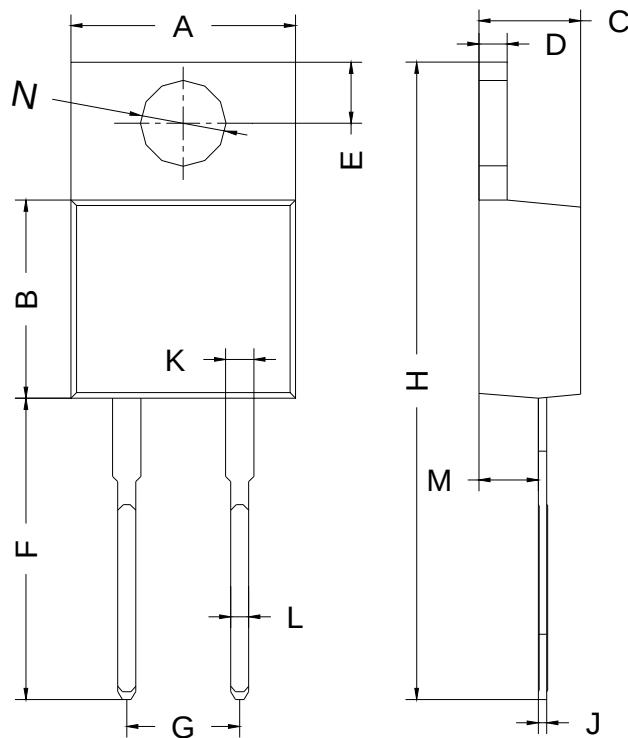
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PACKAGE OUTLINE

Plastic surface mounted package

TO-220AC



TO-220AC		
Dim	Min	Max
A	9.80	10.30
B	8.70	9.10
C	4.57 Typical	
D	1.27 Typical	
E	2.64	2.84
F	13.14	13.74
G	4.98	5.18
H	28.03	28.83
J	0.38 Typical	
K	1.22	1.32
L	0.71	0.91
M	2.50 Typical	
N	3.86 Typical	
All Dimensions in mm		