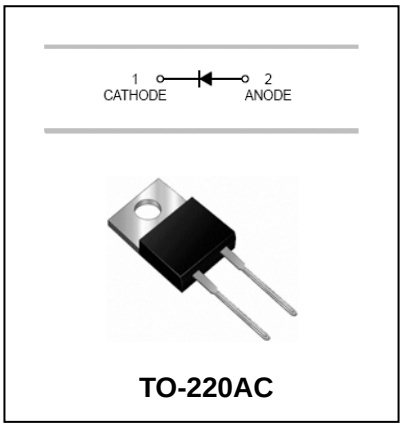
Schottky Barrier Rectifier SBL530---SBL5100

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



TO-220AC

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	SBL 530	SBL 535	SBL 540	SBL 545	SBL 550	SBL 560	SBL 580	SBL 5100	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℃	5.0								A
I_{FSM}	Forward Surge Current 8.3ms Single Half Sine-wave Superimosed on Rated Load	150								A
$R_{\theta JC}$	Thermal Resistance (Note1)	3.0								℃/W
T_j,T_{stg}	Operating Junction and StorageTemperature Range	-55 to +150								℃

Note1: Thermal Resistance Junction to Case

Schottky Barrier Rectifier SBL530---SBL5100

ELECTRICAL CHARACTERISTICS@ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	SBL530-SBL545	SBL550-SBL560	SBL580-SBL5100	UNIT
			MAX			
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25℃$ $V_R=V_{RRM}, T_A=100℃$	0.5 50			mA
Forward Voltage	V_F	I_F=5A	0.60	0.70	0.85	V

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

FIG.1 – PEAK FORWARD SURGE CURRENT

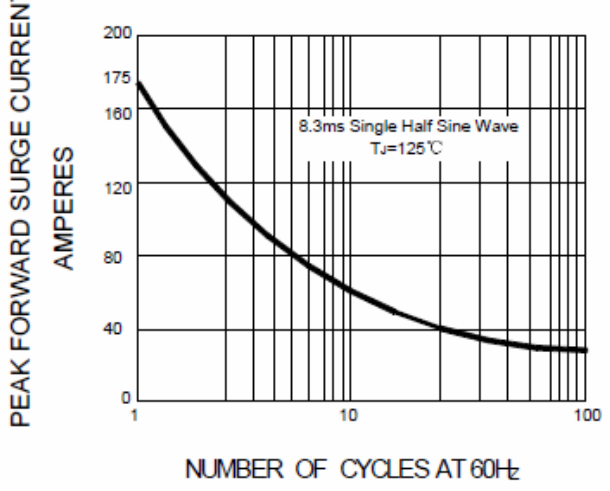


FIG.2 -- FORWARD DERATING CURVE

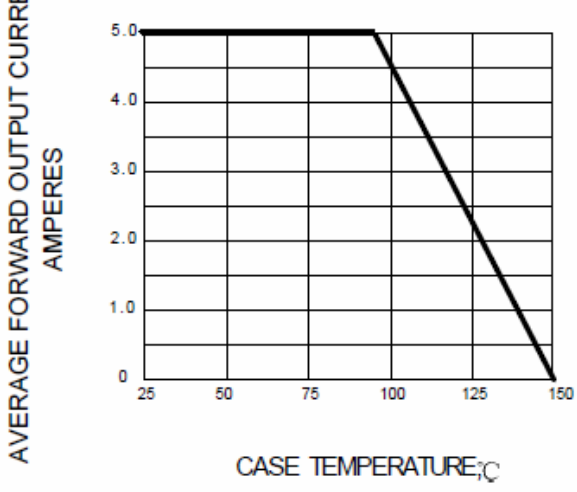


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

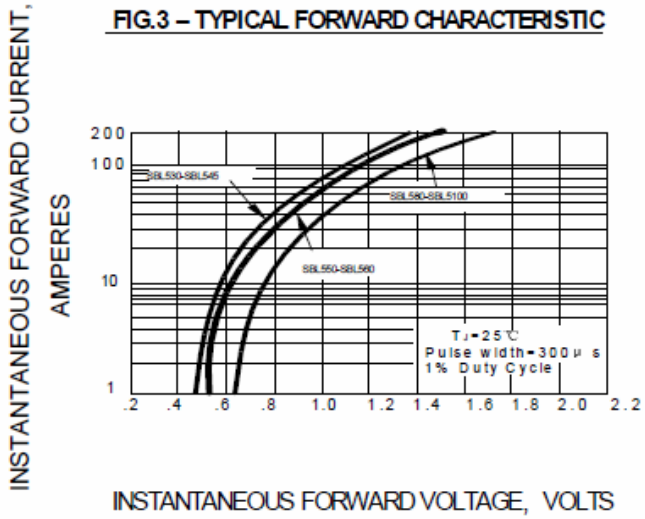
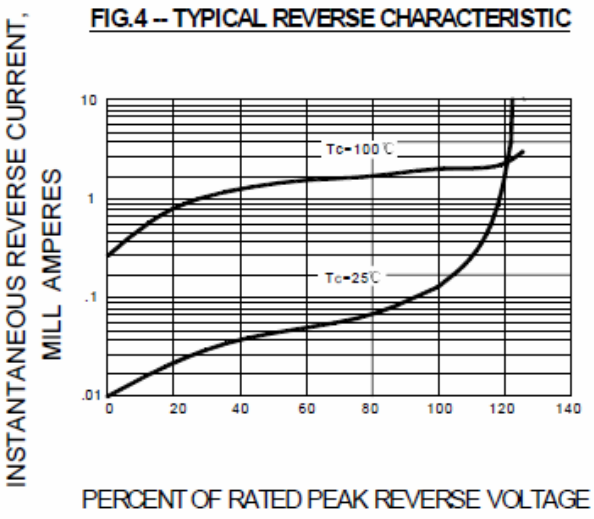


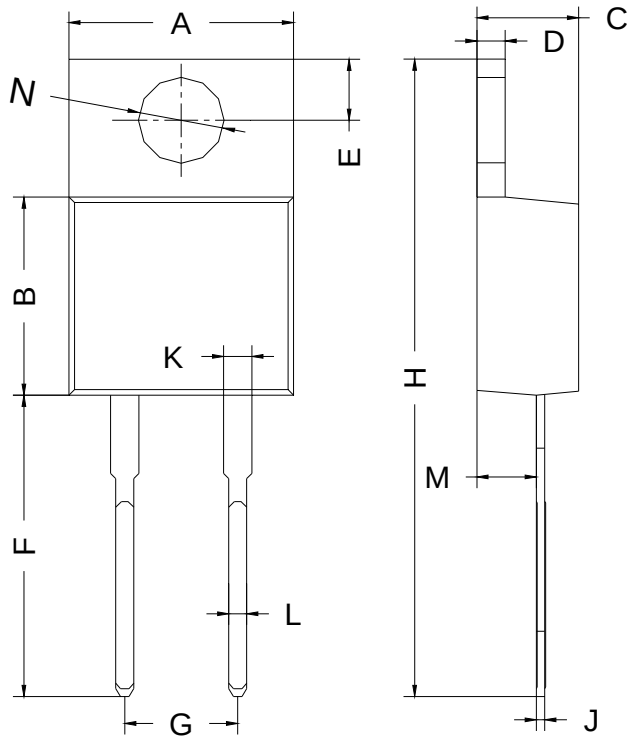
FIG.4 -- TYPICAL REVERSE CHARACTERISTIC



Schottky Barrier Rectifier SBL530---SBL5100

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		