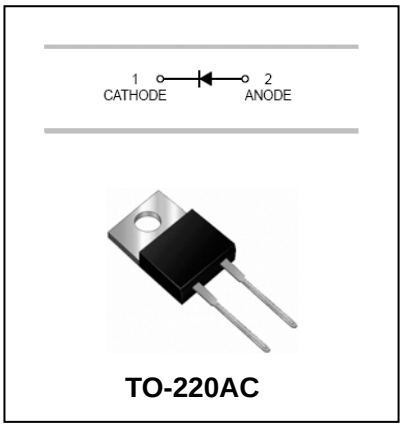
Schottky Barrier Rectifier SBL2030---SBL2060

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.

Pb Lead-free



TO-220AC

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	SBL 2030	SBL 2035	SBL 2040	SBL 2045	SBL 2050	SBL 2060	Unit
V_{RRM}	Recurrent Peak Reverse Voltage	30	35	40	45	50	60	V
V_{RMS}	RMS Reverse Voltage	21	25	28	32	35	42	V
V_{DC}	DC Blocking Voltage	30	35	40	45	50	60	V
$I_{F(AV)}$	Average Forward Total Device Rectified Current @T_A=100℃	20						A
I_{FSM}	Forward Surge Current 8.3ms Single Half Sine-wave Superimosed on Rated Load	250						A
$R_{\theta JC}$	Thermal Resistance (Note1)	1.5						℃/W
T_j	Operating Junction Temperature Range	-55 to +125						℃
T_{stg}	StorageTemperature Range	-55 to +150						℃

Note:1.Thermal resistance from junction to case.

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ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	SBL2030-SBL2045	SBL2050-SBL2060	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=20A	0.60	0.70	V

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

FIG.1 – PEAK FORWARD SURGE CURRENT

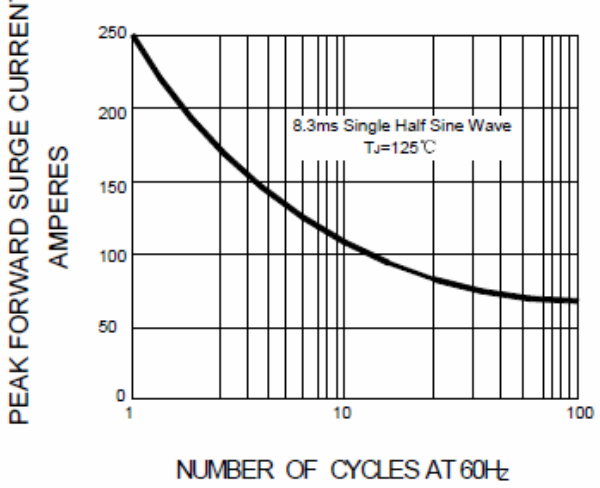


FIG.2 -- FORWARD DERATING CURVE

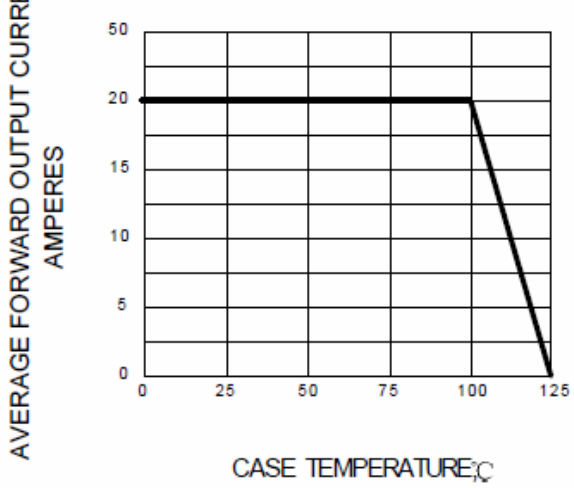


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

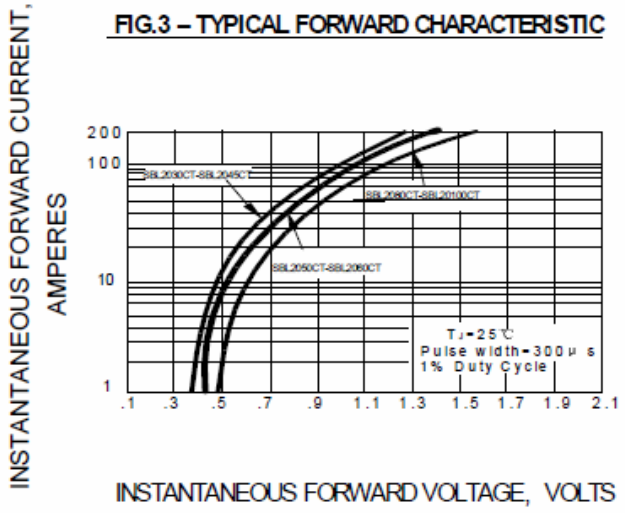
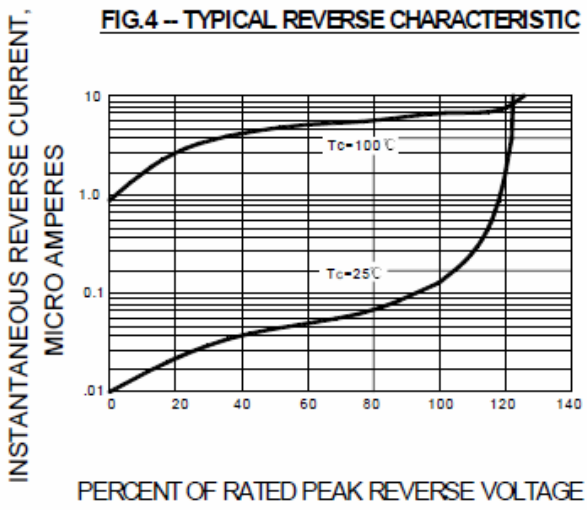


FIG.4 -- TYPICAL REVERSE CHARACTERISTIC



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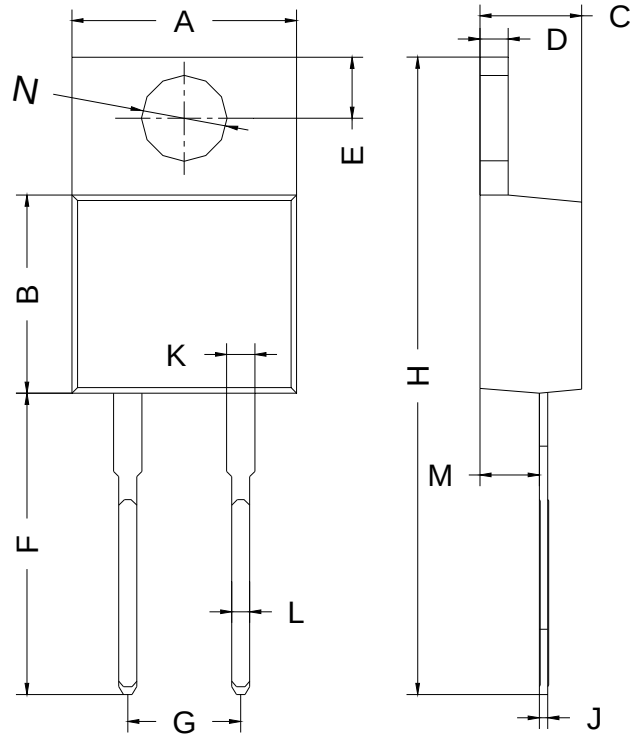
PACKAGE OUTLINE

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		