

Schottky Barrier Rectifier

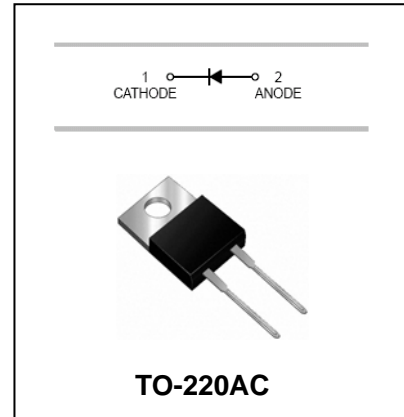
SBL1030---SBL10100

FEATURES

- Metal-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 1030	SBL 1035	SBL 1040	SBL 1045	SBL 1050	SBL 1060	SBL 1080	SBL 10100	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 Rectified Current@ $T_A=100^{\circ}C$	10								A
I_{FSM}	Forward Surge Current 8.3ms Single Half Sine-wave Superimosed on Rated Load	250								A
$R_{\theta JC}$	Thermal Resistance (Note1)	5.0								$^{\circ}C/W$
T_j, T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150								$^{\circ}C$

Note:1.Thermal resistance from junction to case.



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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	SBL1030- SBL1045	SBL1050- SBL1060	SBL1080- SBL10100	UNIT
			MAX			
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25^\circ C$ $V_R=V_{RRM}, T_A=100^\circ C$	0.5 50			mA
Forward Voltage	V_F	$I_F=10A$	0.60	0.70	0.85	V

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG.1 – PEAK FORWARD SURGE CURRENT

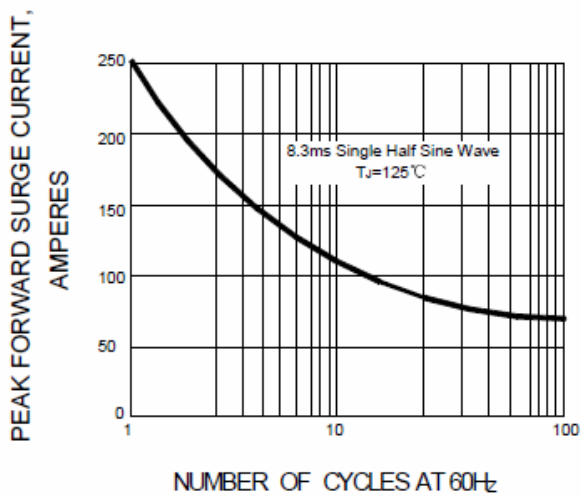


FIG.2 – FORWARD DERATING CURVE

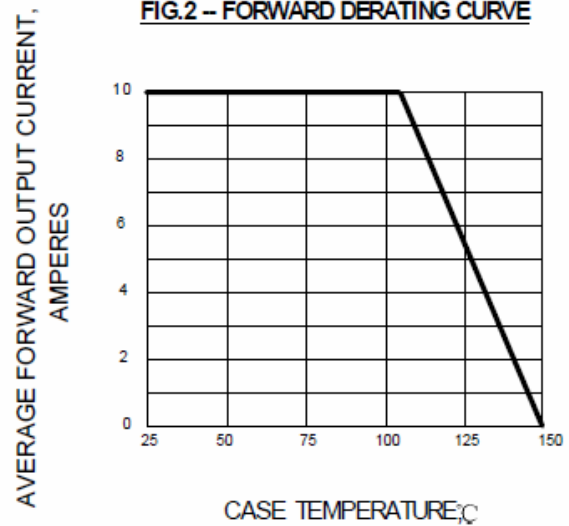


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

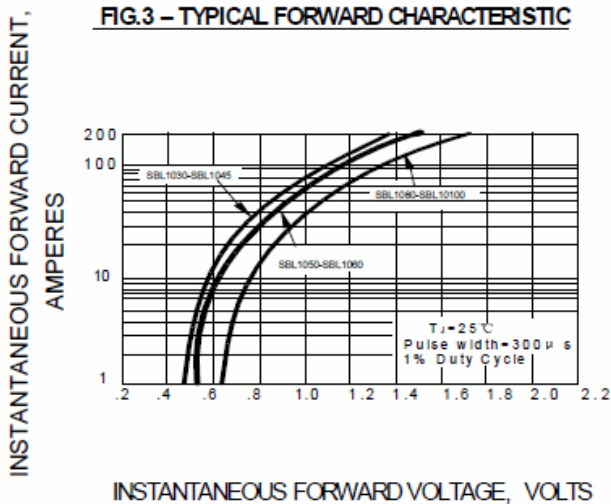
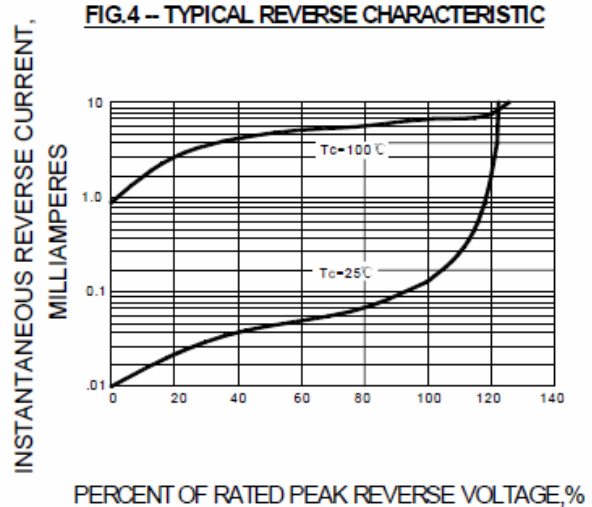


FIG.4 – TYPICAL REVERSE CHARACTERISTIC





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PACKAGE OUTLINE

Plastic surface mounted package

TO-220AC

