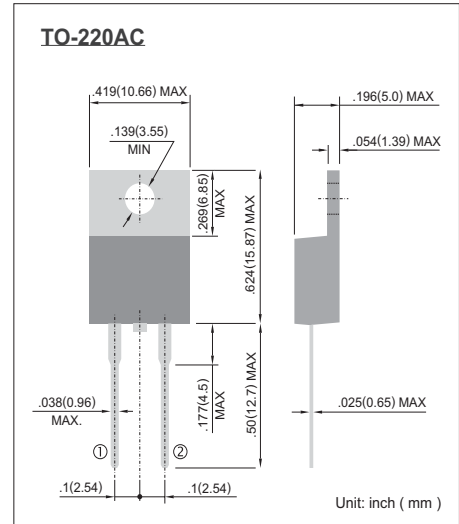
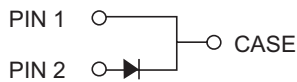


## SBL1030 - SBL1060

### Features

- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- Plastic Material: UL Flammability Classification Rating 94V-0



### Absolute Maximum Ratings and Electrical Characteristics Ta = 25

Parameter	Symbol	SBL 1030	SBL 1035	SBL 1040	SBL 1045	SBL 1050	SBL 1060	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>							
Working Peak Reverse Voltage	V <sub>RWM</sub>	30	35	40	45	50	60	V
DC Blocking Voltage	V <sub>R</sub>							
RMS Reverse Voltage	V <sub>R(RMS)</sub>	21	24.5	28	31.5	35	42	V
Average Rectified Output Current*1	I <sub>O</sub>	10						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	250						A
Forward Voltage @I <sub>F</sub> = 10A	V <sub>F</sub>	0.6				0.75		V
Peak Reverse Current @T <sub>A</sub> = 25	I <sub>R</sub>	1.0						mA
At Rated DC Blocking Voltage @T <sub>A</sub> = 100		50						
Typical Junction Capacitance *2	C <sub>j</sub>	700						pF
Typical Junction Resistance	R <sub>JC</sub>	3.5						/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to 150						

\*1. Thermal resistance junction to case mounted on heatsink.

\*2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

# SBL1030 - SBL1060

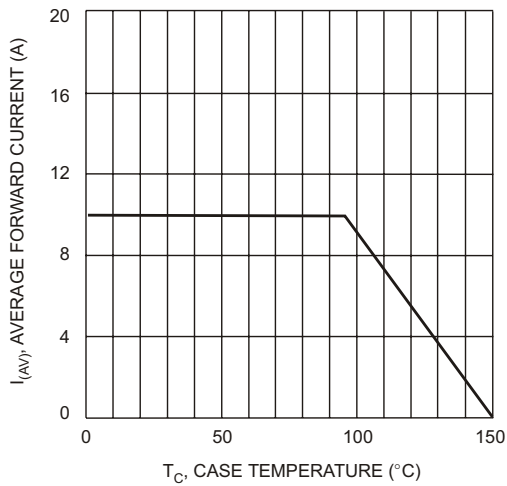


Fig. 1 Forward Current Derating Curve

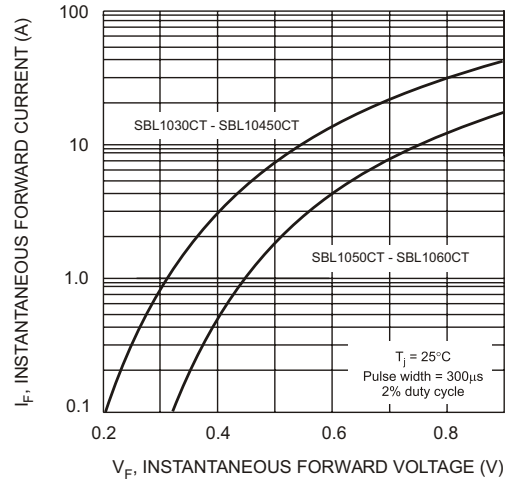


Fig. 2 Typical Forward Characteristics

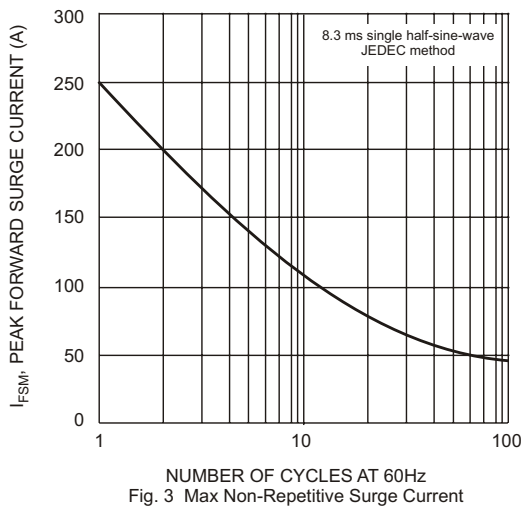


Fig. 3 Max Non-Repetitive Surge Current

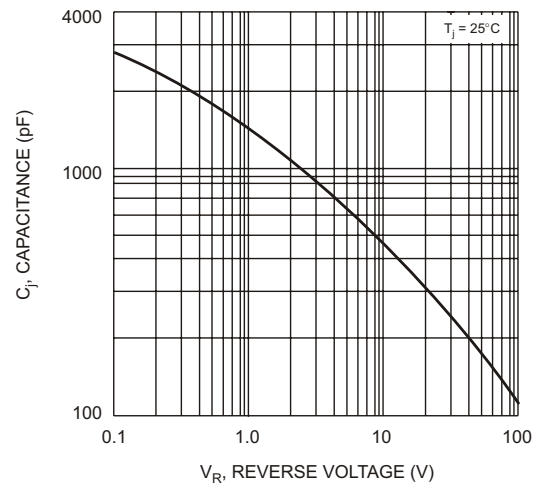


Fig. 4 Typical Junction Capacitance per Element

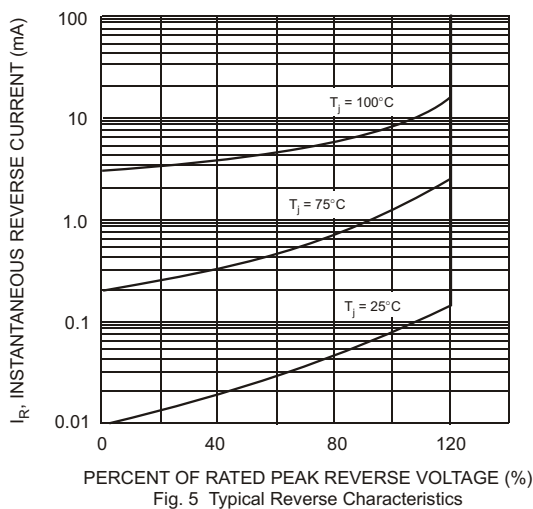


Fig. 5 Typical Reverse Characteristics