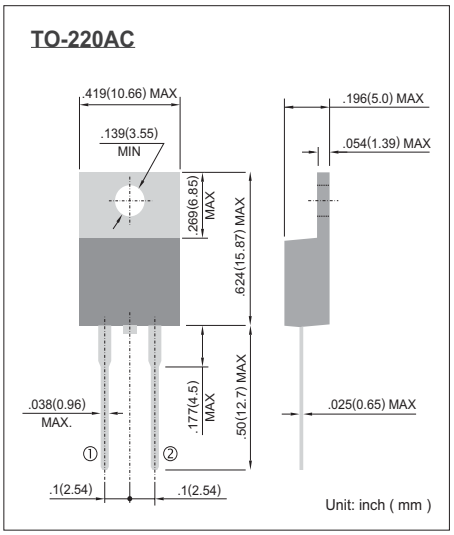
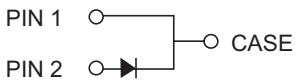
Schottky Barrier Rectifier

SBL1030 - SBL1060



■ Features

- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low ForwardVoltage Drop
- For Use in Low Voltage, High FrequencyInverters, Free Wheeling, and PolarityProtection Applications
- Plastic Material: UL FlammabilityClassification 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 Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	35	40	45	50	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	24.5	28	31.5	35	42	V
Average Rectified Output Current*1	I_O	10						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	250						A
Forward Voltage @I_F = 10A	V_F	0.6				0.75		V
Peak Reverse Current @T_A = 25℃ At Rated DC Blocking Voltage @T_A = 100℃	I_R	1.0 50						mA
Typical Junction Capacitance *2	C_j	700						pF
Typical Junction Resistance	$R_{\theta JC}$	3.5						℃/W
Operating and Storage Temperature Range	T_j.T_{STG}	-65 to150						℃

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

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

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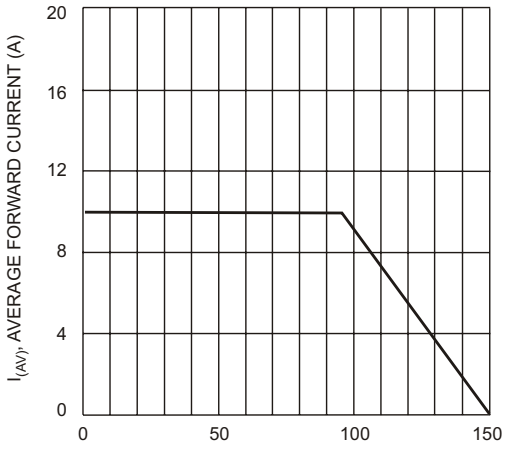

Fig. 1 Forward Current Derating Curve

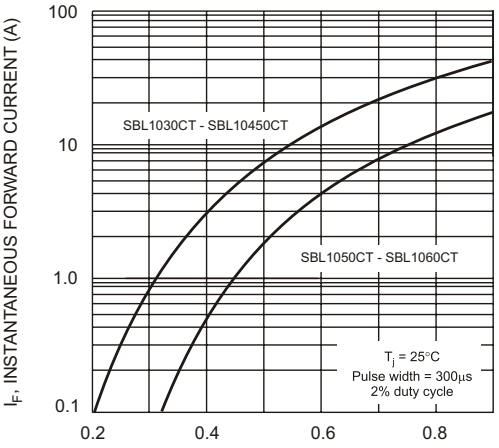

Fig. 2 Typical Forward Characteristics

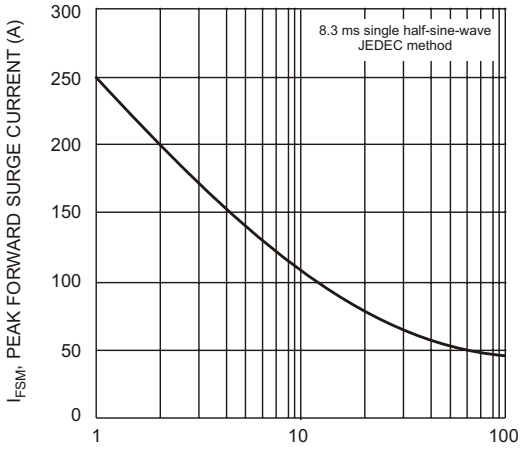

Fig. 3 Max Non-Repetitive Surge Current

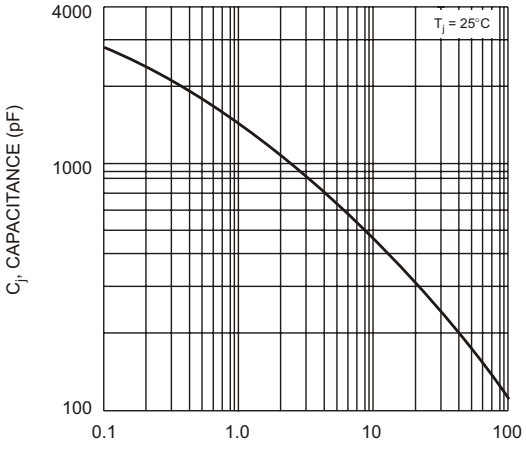

Fig. 4 Typical Junction Capacitance per Element

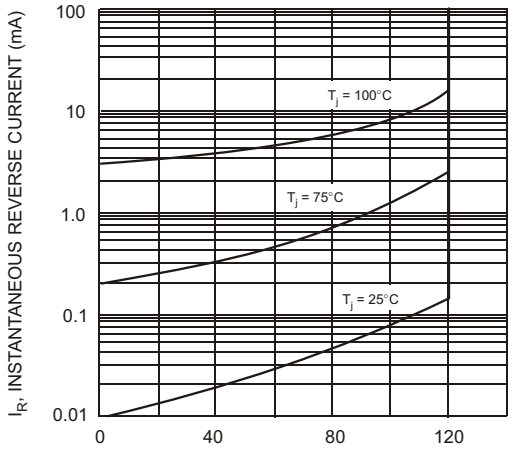

Fig. 5 Typical Reverse Characteristics