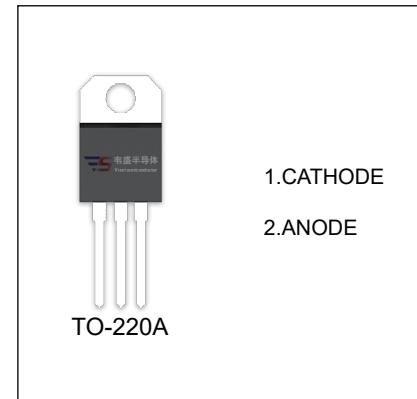


SBL1030,35,40,45,50,60

SCHOTTKY BARRIER RECTIFIER

FEATURES

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- 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



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value						Unit
		SBL 1030	SBL 1035	SBL 1040	SBL 1045	SBL 1050	SBL 1060	
V_{RRM}	Peak repetitive reverse voltage							
V_{RWM}	Working peak reverse voltage	30	35	40	45	50	60	V
V_R	DC blocking voltage							
$V_{R(RMS)}$	RMS reverse voltage	21	24.5	28	31.5	35	42	V
I_o	Average rectified output current@ $T_c=95^\circ\text{C}$				10			A
I_{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave				250			A
P_D	Power dissipation			2				W
R_{QJA}	Thermal resistance from junction to ambient			50				$^\circ\text{C}/\text{W}$
T_j	Operating Junction Temperature Range			-40 ~ +125				$^\circ\text{C}$
T_{stg}	Storage Temperature Range			-55 ~ +150				$^\circ\text{C}$

Parameter	Symbol	Device	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	SBL1030	I _R =0.5mA	30			V
		SBL1035		35			
		SBL1040		40			
		SBL1045		45			
		SBL1050		50			
		SBL1060		60			
Reverse current	I _R	SBL1030	V _R =30V				0.45 mA
		SBL1035	V _R =35V				
		SBL1040	V _R =40V				
		SBL1045	V _R =45V				
		SBL1050	V _R =50V				
		SBL1060	V _R =60V				
Forward voltage	V _F	SBL1030-1045	I _F =10A			0.55	V
		SBL1050,1060				0.7	