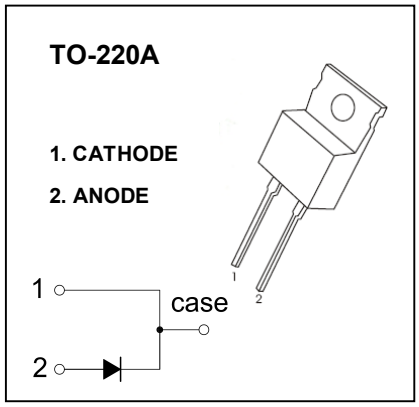
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220A Plastic-Encapsulate Diodes

SBL1630,35,40,45,50,60

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℃ unless otherwise noted)

Symbol	Parameter	Value						Unit
		SBL 1630	SBL 1635	SBL 1640	SBL 1645	SBL 1650	SBL 1660	
V_{RRM}	Peak repetitive reverse voltage	30	35	40	45	50	60	V
V_{RWM}	Working peak reverse voltage							
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℃	16						A
I_{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave	275						A
P_D	Power dissipation	2						W
$R_{\Theta JA}$	Thermal resistance from junction to ambient	50						℃/W
T_j	Junction temperature	125						℃
T_{stg}	Storage temperature	-55~+150						℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Device	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	SBL1630	I_R=1mA	30			V
		SBL1635		35			
		SBL1640		40			
		SBL1645		45			
		SBL1650		50			
		SBL1660		60			
Reverse current	I_R	SBL1630	V_R=30V			1	mA
		SBL1635	V_R=35V				
		SBL1640	V_R=40V				
		SBL1645	V_R=45V				
		SBL1650	V_R=50V				
		SBL1660	V_R=60V				
Forward voltage	V_F	SBL1630-1645	I_F=16A			0.57	V
		SBL1650,1660				0.75	
Typical junction capacitance	C_j	SBL1630-1660	V_R=4V,f=1MHz		700		pF