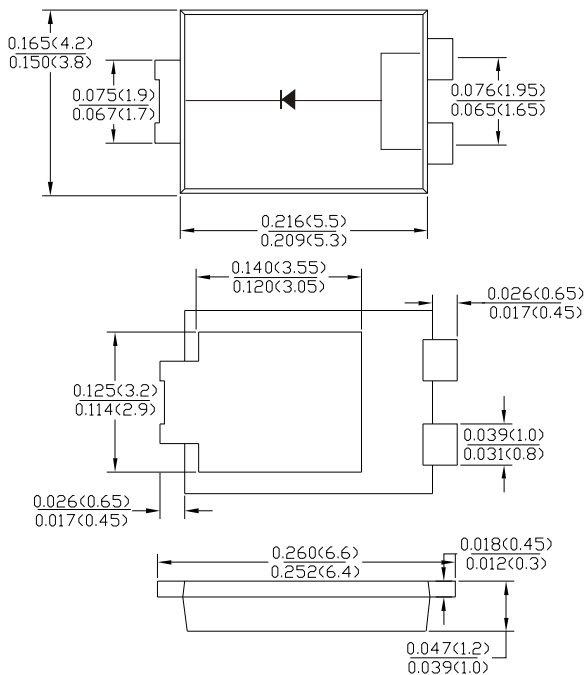




# SB1045L THRU SB10150L

## 10.0A Surface Mount Schottky Barrier Rectifiers

### T0-277



Dimensions inches and ( millimeters)

### Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Fow Power Loss,High Efficiency
- Excellent High Temperature Stability
- Plastic material-UL flammability 94V-0

### Mechanical Data

- Case: T0-277, molded plastic
- Terminals:Plated Leads Solderable per MIL-STD-202,Method 208
- Polarity:Cathode Band
- Mounting Position:Any
- Marking:Type Number
- Lead Free:For RoHS/Lead Free Version

### Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Single Phase,half wave,60Hz,resistive or inductive load.For capacitive load,derate current by 20%.

Parameter	Symbol	SB 1045L	SB 1050L	SB 1060L	SB 1080L	SB 10100L	SB 10150L	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$							
Working Peak Reverse Voltage	$V_{RWM}$	45	50	60	80	100	150	V
DC blocking voltage	$V_{DC}$							
RMS Rectified Voltage	$V_{R(RMS)}$	32	35	42	56	70	105	V
Average Rectified Output Current (Note1)	$I_o$	10						A
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2)	$I_{FSM}$	150						A
Forward Voltage Drop $T_A = 25^\circ\text{C}$ @ $I_F=10\text{A}$	$V_{FM}$	0.55	0.6	0.75	0.78			V
Peak Reverse Curent $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$	$I_r$	0.3 15						mA
Typical Thermal Resistance Junctionto Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80 15						$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55 to +150						$^\circ\text{C}$
storage temperature range	$T_{STG}$	-55 to +150						$^\circ\text{C}$

Note:1.Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.

2.Fr-4pcb.2oz.Copper,minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.



# RATINGS AND CHARACTERISTIC CURVES SB1045L THRU SB10150L

Fig.1 - Forward Current Derating Curve

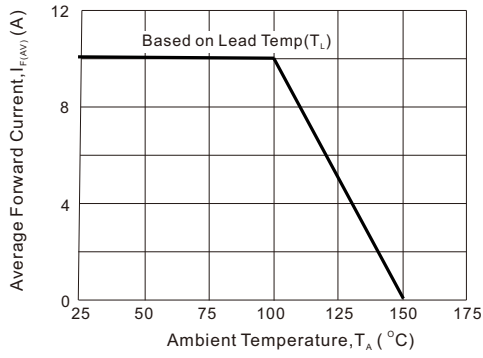


Fig2 : Instantaneous Forward Voltage

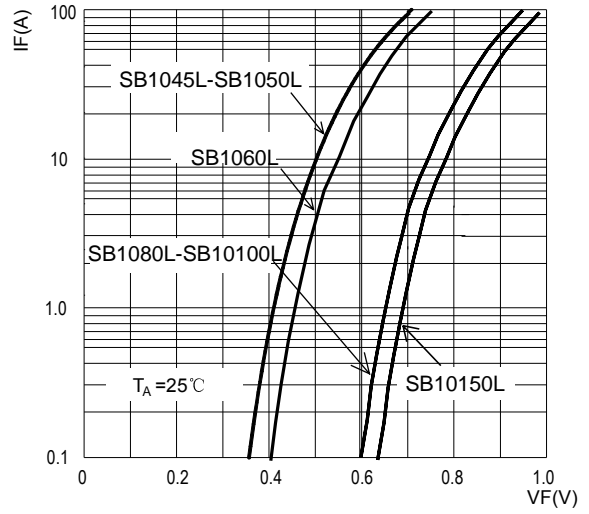


Fig3: Surge Forward Current Capadility

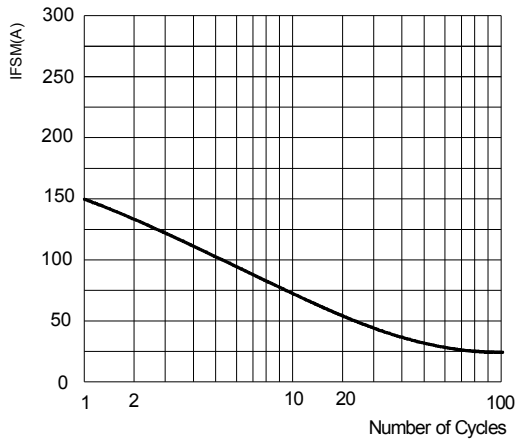
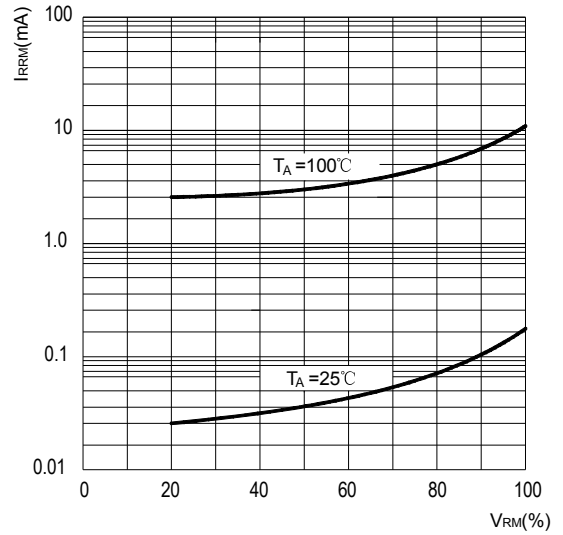


Fig4: Typical Reverse Characteristics



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

