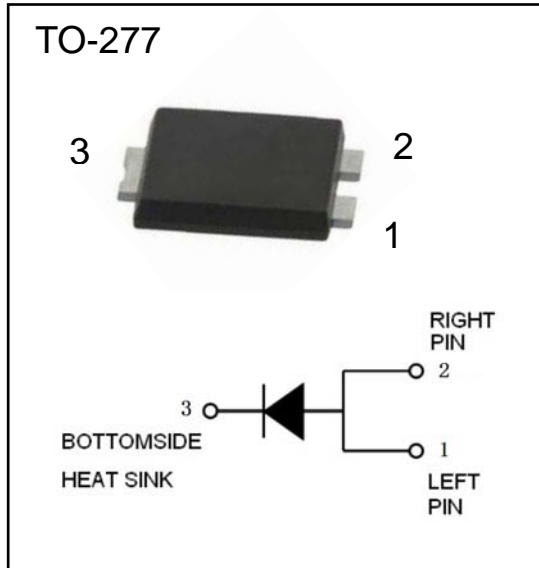


## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



### Features

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

### Mechanical Data

- ◆ **Case** : JEDEC TO-277 Molded plastic body
- ◆ **Terminals** :Plated Leads Solderable per MIL-STD-202,Method 208
- ◆ **Polarity** : Polarity symbol marking on body
- ◆ **Mounting Position** : Any
- ◆ **Weight** : 0.003 ounce, 0.092 grams

## Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SB1045L	SB1050L	SB1060L	SB1080L	SB10100L	SB10150L	UNIT
Marking Code		SB1045L	SB1050L	SB1060L	SB1080L	SB10100L	SB10150L	
Maximum repetitive peak reverse voltage	$V_{RRM}$	45	50	60	80	100	150	V
Maximum working peak reverse voltage	$V_{RWM}$							
Maximum DC blocking voltage	$V_{DC}$							
RMS Reverse voltage	$V_{RMS}$	32	35	42	56	70	105	V
Average Rectified Output Current	$I_{(o)}$	10						A
Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method)	$I_{FSM}$	150						A
Forward Voltage Drop at 10.0A $T_A=25^\circ C$	$V_F$	0.5	0.55	0.75	0.78			V
Peak reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=125^\circ C$	$I_R$	0.3 15						mA
Typical thermal resistance Junction to Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80 15						$^\circ C/W$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150						$^\circ C$

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.

## Typical Characteristics

Fig.1 - Forward Current Derating Curve

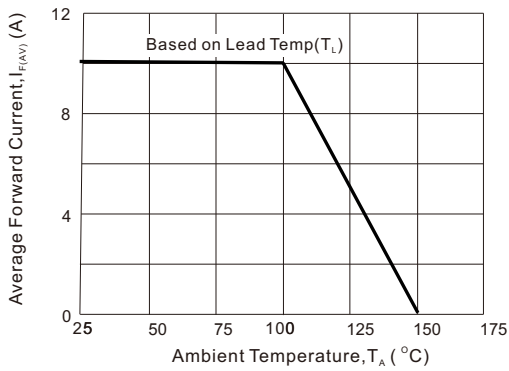


Fig2 : Instantaneous Forward Voltage

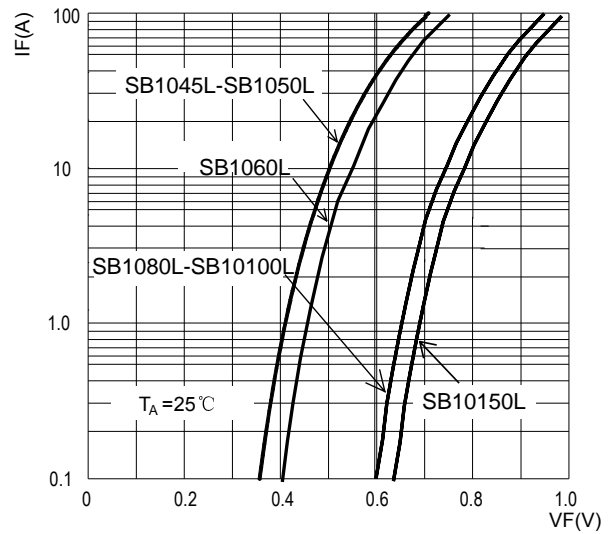


Fig3: Surge Forward Current Capacity

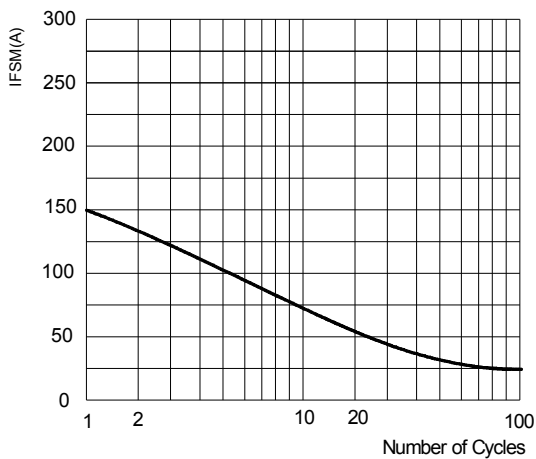
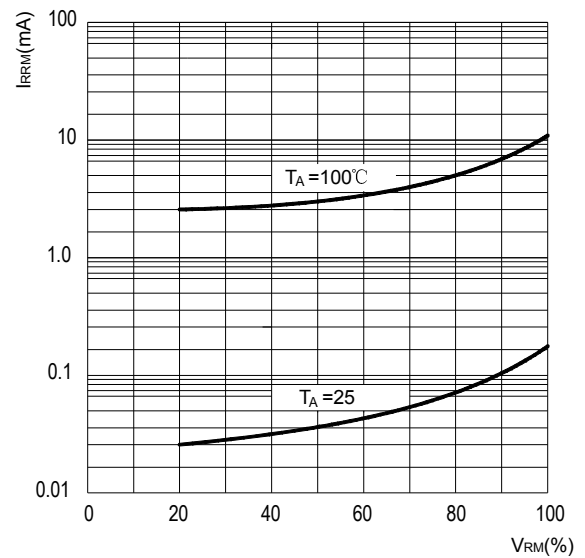


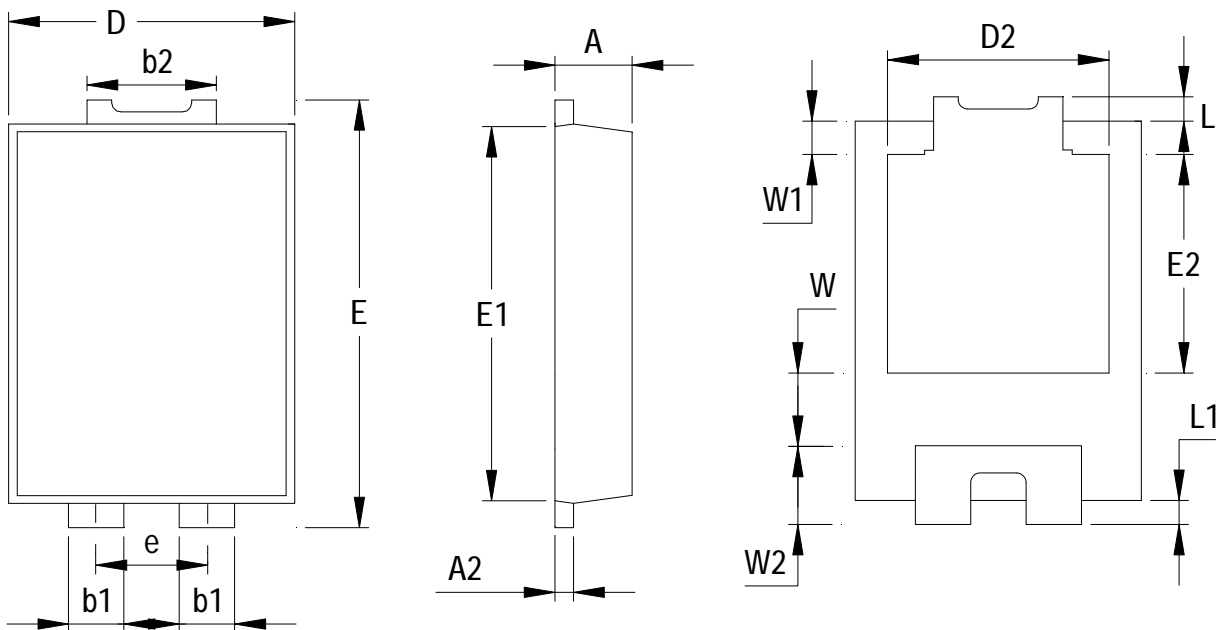
Fig4: Typical Reverse Characteristics



## Package Dimension

TO-277

Units: mm



NO	Dimensions	NO	Dimensions
A	1.25±0.05	e	1.8Typ
A2	0.30±0.02	E1	6.25±0.05
b1	0.9±0.05	E2	3.6±0.2
b2	2.1±0.05	L/L1	0.4±0.05
D	4.65±0.05	W	1.2±0.2
D2	3.60Typ	W1	0.55±0.15
E	7.05±0.1	W2	1.3±0.2
<b>All Dimensions in mm</b>			