



SB1045L THRU SB10200L

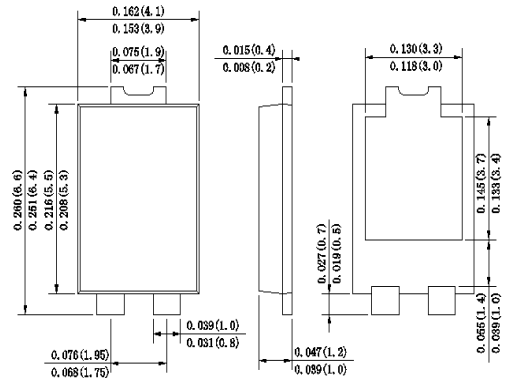
Reverse Voltage - 45 to 200 Volts Forward Current -10.0 Ampere

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

TO-277



Mechanical Data

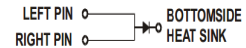
Case : JEDEC TO-277 Molded plastic body

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



Dimensions in inches and (millimeters)

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	SB 1045L	SB 1050L	SB 1060L	SB 1080L	SB 10100L	SB 10150L	SB 10200L	UNIT
		MDD SB 1045L	MDD SB 1050L	MDD SB 1060L	MDD SB 1080L	MDD SB 10100L	MDD SB 10150L	MDD SB 10200L	
Maximum repetitive peak reverse voltage	V_{RRM}	45	50	60	80	100	150	200	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	140	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	0.55	0.60	0.75		0.78	0.92	V	
Peak reverse curent at rated DC blocking voltage $T_A=25^\circ C$ $T_A=125^\circ C$	I_R	0.3 15							mA
Typical thermal resistance Junctionto 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×14.4m m.



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Ratings And Characteristic Curves

Fig.1 - Forward Current Derating Curve

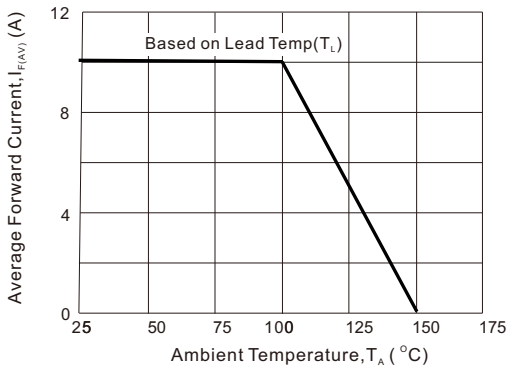


Fig2 : Instantaneous Forward Voltage

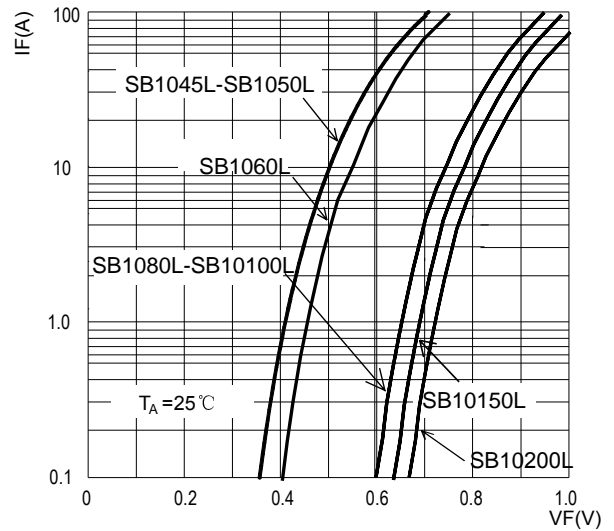


Fig3: Surge Forward Current Capacity

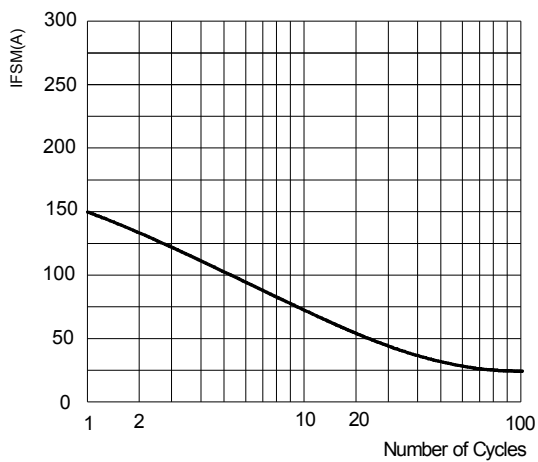
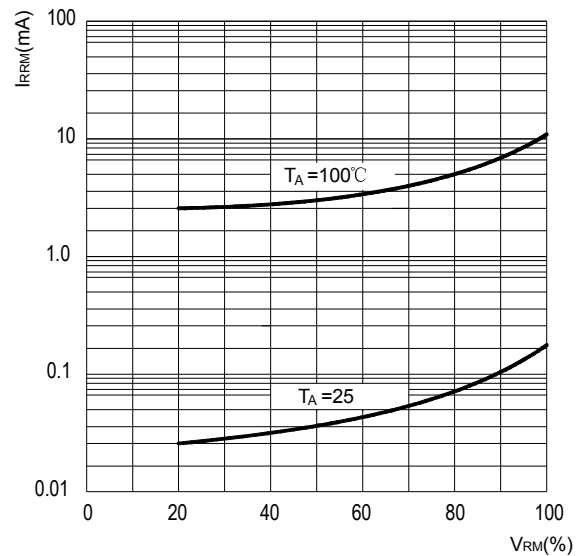


Fig4: Typical Reverse Characteristics



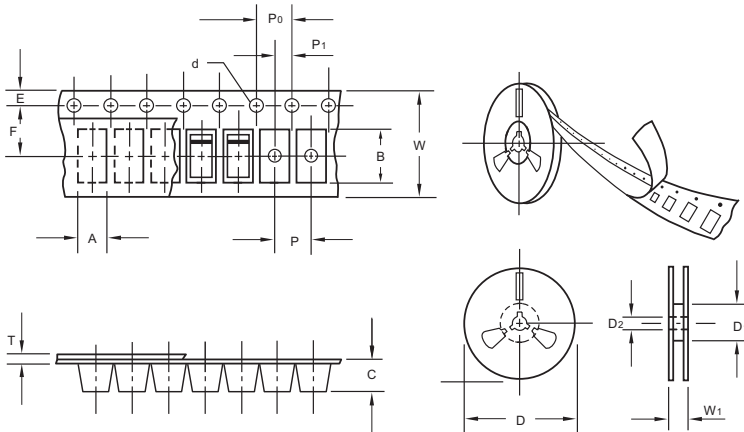
The curve above is for reference only.



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Packing information



unit:mm

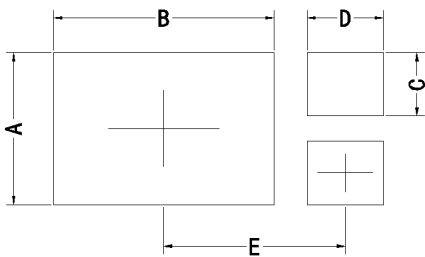
Item	Symbol	Tolerance	TO-277
Carrier width	A	0.1	4.45
Carrier length	B	0.1	7.0
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1.55
11" Reel outside diameter	D	2.0	280.00
11" Reel inner diameter	D1	min	50.0
Feed hole diameter	D2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	7.50
Punch hole pitch	P	0.1	8.00
Sprocket hole pitch	P0	0.1	4.00
Embossment center	P1	0.1	2.00
Overall tape thickness	T	0.1	0.25
Tape width	W	0.3	12.00
Reel width	W1	1.0	12.30

Note: Devices are packed in accordance with EIA standard RS-481-A and specifications listed above.

Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA. (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
TO-277	11"	3,000	5.0	6,000	340*340*43	280	380*380*380	48,000	9.0

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	3.60	0.142
B	5.35	0.211
C	1.50	0.059
D	1.85	0.073
E	4.30	0.169

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