



# SB1535L THRU SB15200L

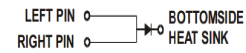
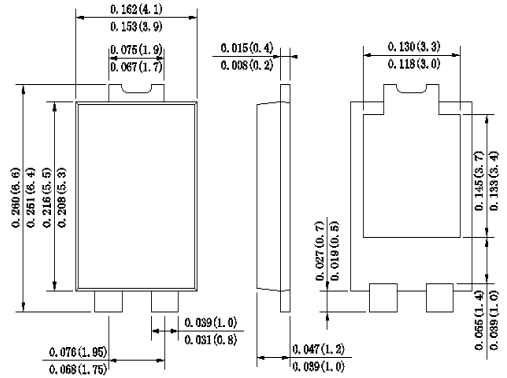
Reverse Voltage -35 to 200 Volts Forward Current -15.0 Ampere

## 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



Dimensions in inches and (millimeters)

### Mechanical Data

- Case** : JEDEC TO-277 Molded plastic body  
**Terminals** :Plated Leads Solderable per MIL-STD-750,Method 2026  
**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	SB1535L	SB1545L	SB1550L	SB1560L	SB15100L	SB15150L	SB15200L	UNIT
		MDD SB1535L	MDD SB1545L	MDD SB1550L	MDD SB1560L	MDD SB15100L	MDD SB15150L	MDD SB15200L	
Maximum repetitive peak reverse voltage	$V_{RRM}$	35	45	50	60	100	150	200	V
RMS Reverse voltage	$V_{RMS}$	25	32	35	42	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	35	45	50	60	100	150	200	V
Average Rectified Output Current See Fig.1	$I_{(O)}$	15							A
Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC)	$I_{FSM}$	150							A
Forward Voltage Drop at 15A $T_A=25^\circ C$	$V_F$	0.50		0.55		0.70	0.80	0.85	V
Peak reverse curent at rated DC $T_A=25^\circ C$ blocking voltage (Note 1)	$I_R$	30			50				mA
Typical thermal resistance	$R_{\theta JC}$	3.0							$^\circ C/W$
Operating junction temperature range	$T_J$	-65 to +150							$^\circ C$
Storage temperature range	$T_{STG}$	-65 to +150							$^\circ C$

- Note:** 1.Pulse test:300us pulse width,1% duty cycle.  
 2.The rmal resistance from junction to case.  
 3.The typical data above is for referenceonly.



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## Ratings And Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

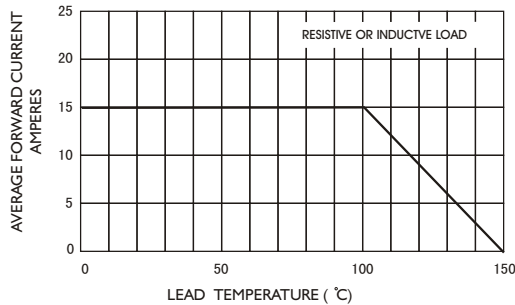


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

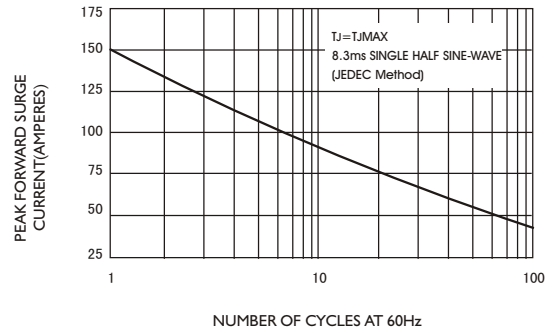


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

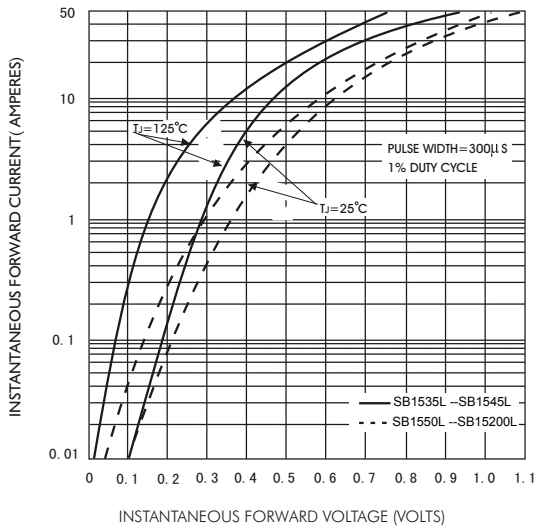


FIG.4-TYPICAL REVERSE CHARACTERISTICS

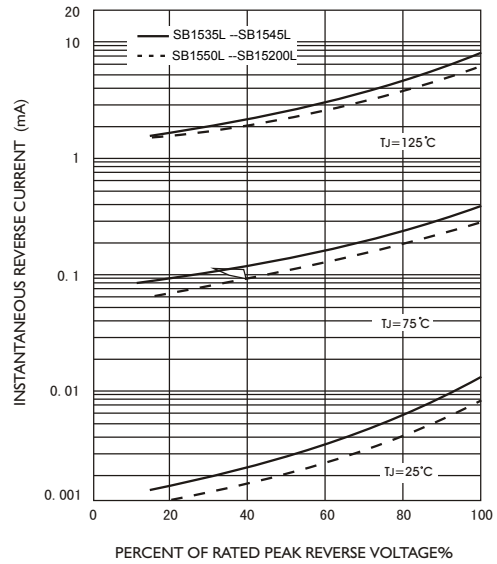


FIG.5-TYPICAL JUNCTION CAPACITANCE

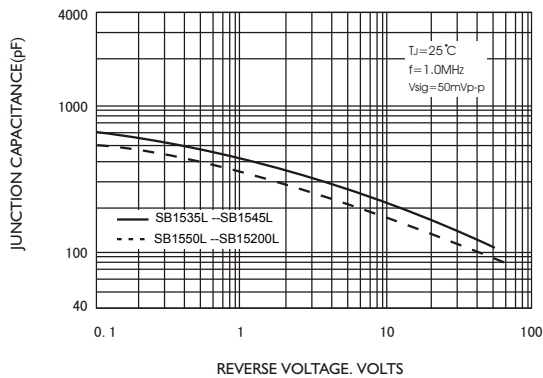
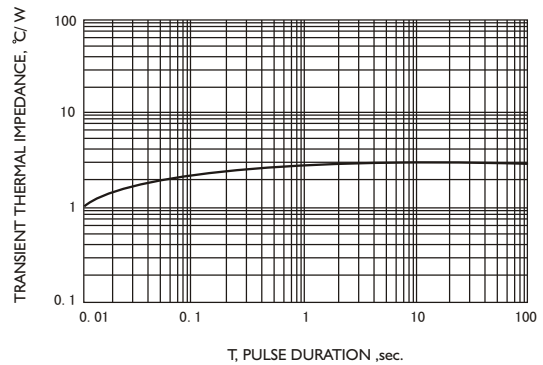


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



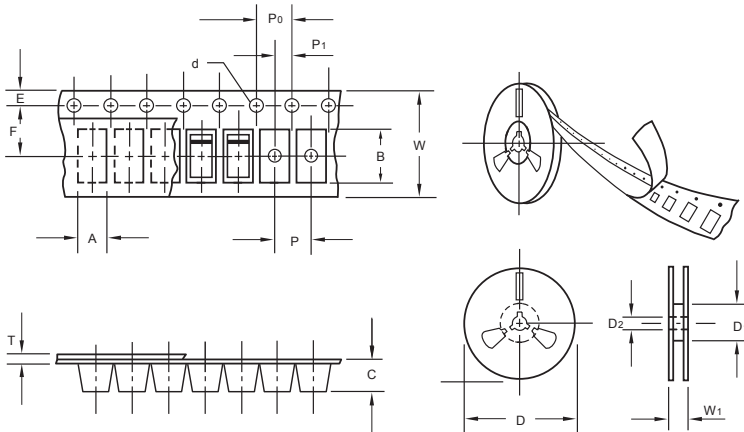
The curve above is for reference only.



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## Packing information



unit:mm

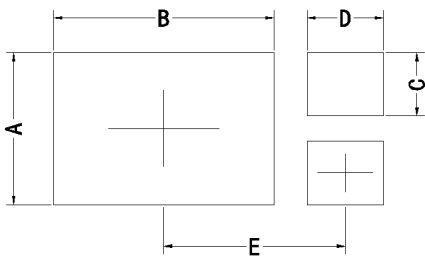
Item	Symbol	Tolerance	TO-277
Carrier width	A	0.1	4.45
Carrier length	B	0.1	7.0
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1.55
11" Reel outside diameter	D	2.0	280.00
11" Reel inner diameter	D <sub>1</sub>	min	50.0
Feed hole diameter	D <sub>2</sub>	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	7.50
Punch hole pitch	P	0.1	8.00
Sprocket hole pitch	P <sub>0</sub>	0.1	4.00
Embossment center	P <sub>1</sub>	0.1	2.00
Overall tape thickness	T	0.1	0.25
Tape width	W	0.3	12.00
Reel width	W <sub>1</sub>	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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