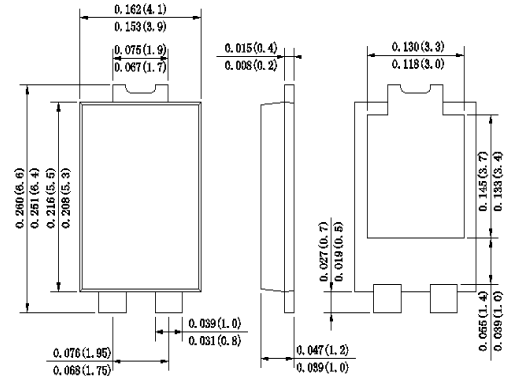


SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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



LEFT PIN  RIGHT PIN  BOTTOMSIDE HEAT SINK

Dimensions in inches and (millimeters)

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	SB 1045L	SB 1050L	SB 1060L	SB 1080L	SB 10100L	SB 10150L	SB 10200L	UNIT
Marking Code		SB 1045L	SB 1050L	SB 1060L	SB 1080L	SB 10100L	SB 10150L	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 Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method)	I _{FSM}	150							A
Forward Voltage Drop at 10.0A T _A =25℃	V _F	0.55		0.60	0.75		0.78	0.92	V
Peak reverse curent T _A =25℃ at rated DC blocking voltage T _A =125℃	I _R	0.3 15							mA
Typical thermal resistance Junctionto Ambient	R _{θJA} R _{θJL}	80 15							℃/W
Operating junction and storage temperature range	T _J ,T _{STG}	-55 to +150							℃

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.

Ratings And Characteristic Curves

Fig.1 - Forward Current Derating Curve

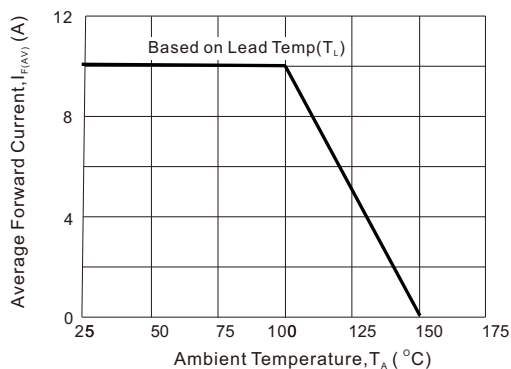


Fig2 : Instantaneous Forward Voltage

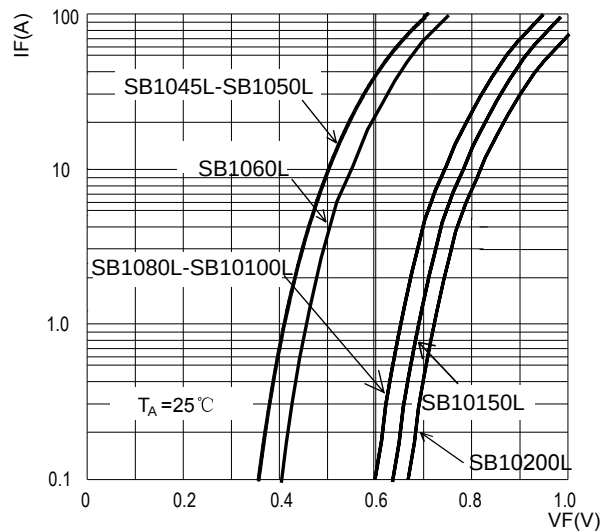


Fig3: Surge Forward Current Capability

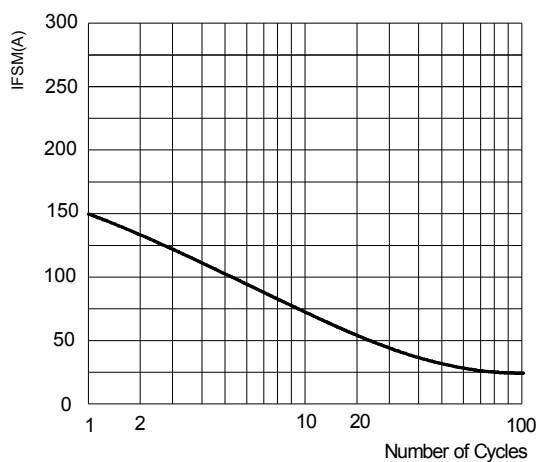
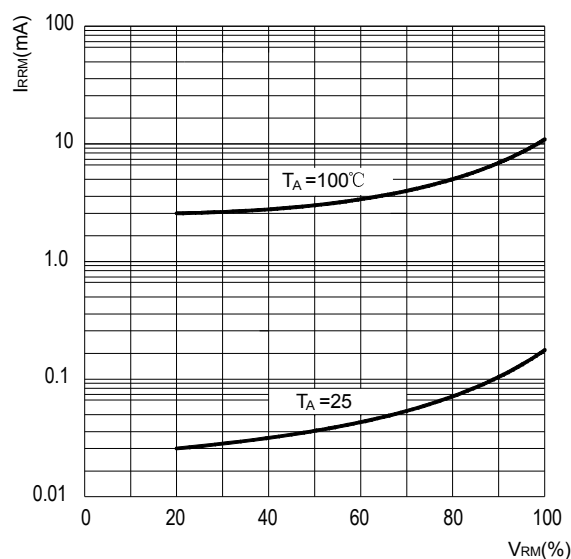
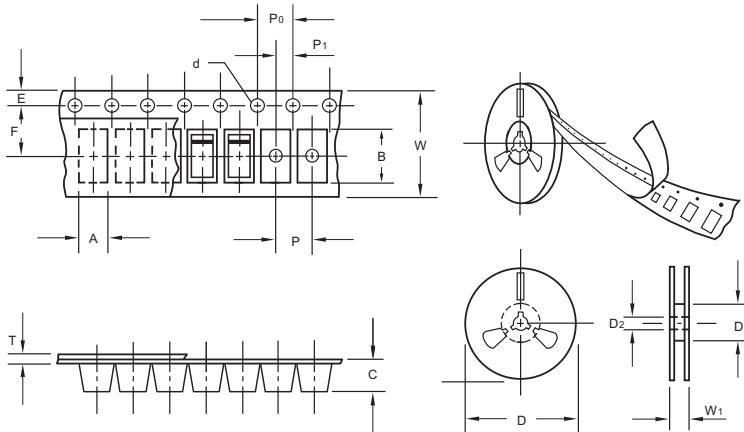


Fig4: Typical Reverse Characteristics



The curve above is for reference only.

Packing information



unit:mm

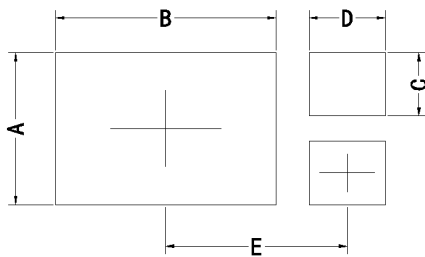
Item	Symbol	Tolerance	TO-277
Carrier width	A	0.1	4.45
Carrier length	B	0.1	7.0
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1.55
11" Reel outside diameter	D	2.0	280.00
11" Reel inner diameter	D1	min	50.0
Feed hole diameter	D2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	7.50
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	13"	5,000	5.0	1,0000	340*340*43	280	380*380*380	60,000	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