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SB1045L（112MIL）

LOW VF SCHOTTKY BARRIER RECTIFIER

产品规格书

承认书

客户确认：				公司签章：
部门	工程部	品保部	采购部	
签名				
日期				

SB1045L

10A SBR SUPER BARRIER RECTIFIER

Features

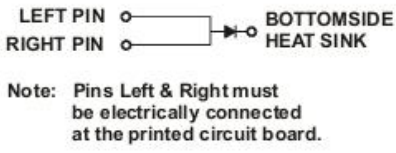
- Selectively Rated for 200ºC Maximum Junction Temperature for High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Forward Voltage Drop
- Excellent High Temperature Stability

Mechanical Data

- Case: TO-277
- Case Material: Molded Plasti c, “Green” Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish – Matte Tin annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208
- Weight: 0.093 grams (approximate)

Top View

Bottom View



Maximum Ratings @TA = 25°C unless otherwise specified

Single phase, half wave, 60Hz, re sistive or inductive load.

For capacitance load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	45	V
RMS Reverse Voltage	$V_{R(RMS)}$	32	V
Average Rectified Output Current	I_O	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	IFSM	180	A

Thermal Characteristics

Characteristic		Symbol	Value	Unit
Maximum Thermal Resistance Thermal Resistance Junction to Ambient (Note 1)		RθJA	26	ºC/W
Operating Temperature Range	V R ≤ 80% VRRM	TJ	-65 to +150	ºC
	V R ≤ 50% VRRM		≤180	
	DC Forward Mode		≤200	
Storage Temperature Range		TSTG	-65 to +175	ºC

Electrical Characteristics @TA = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop (Per Leg)	VF	-	0.46	-	V	IF = 10A, TJ = 25ºC
Leakage Current (Note 2)	IR	-	-	0.5 100	mA	V R = 40V, TJ = 25ºC V R = 40V, TJ = 125ºC

Notes: 1. Polymide, 2oz. Copper 16x minimum recommended pad layout
2. Short duration pulse test used to minimize self-heating effect.

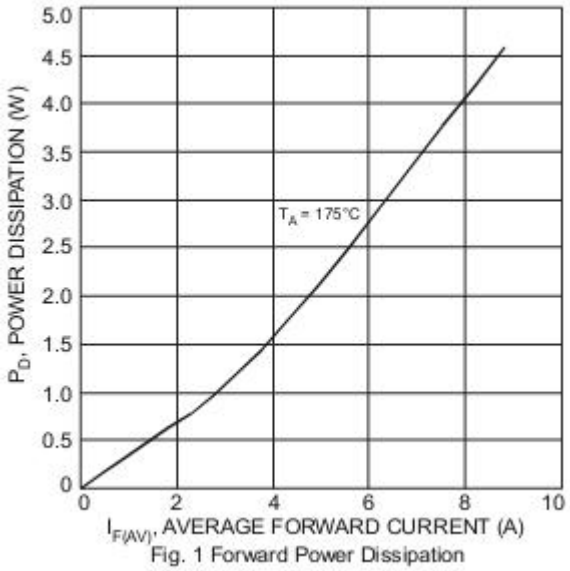


Fig. 1 Forward Power Dissipation

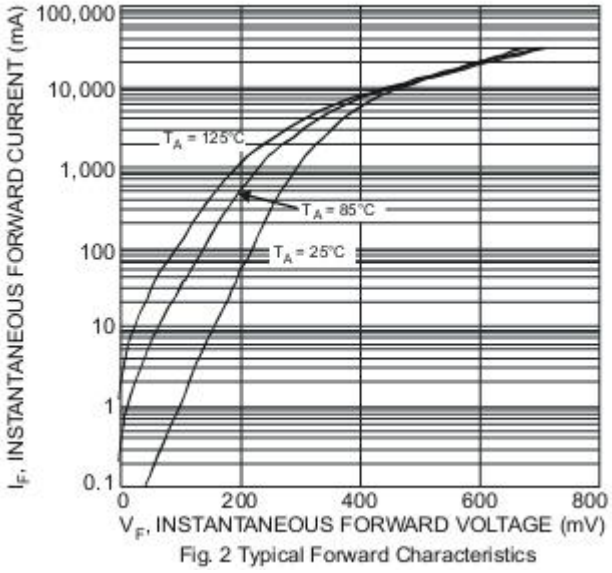


Fig. 2 Typical Forward Characteristics

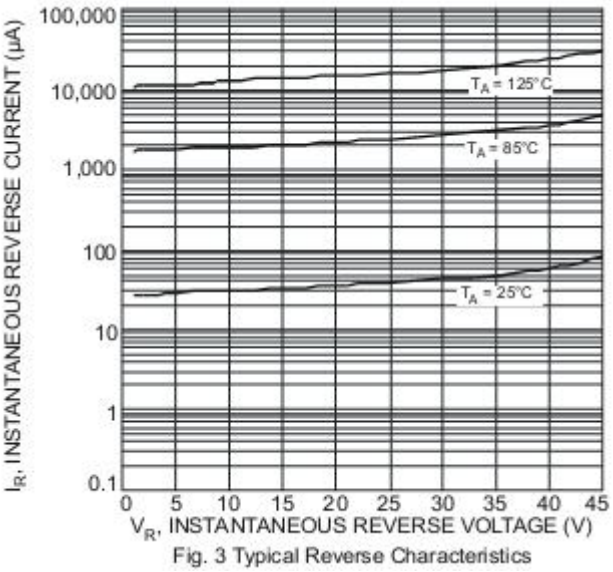


Fig. 3 Typical Reverse Characteristics

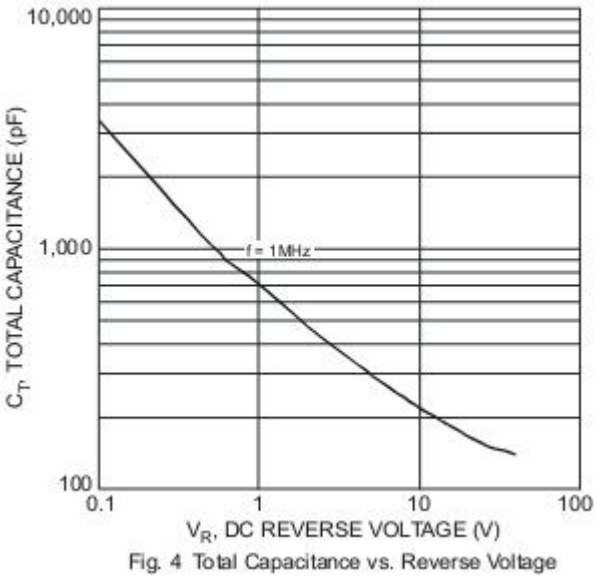


Fig. 4 Total Capacitance vs. Reverse Voltage

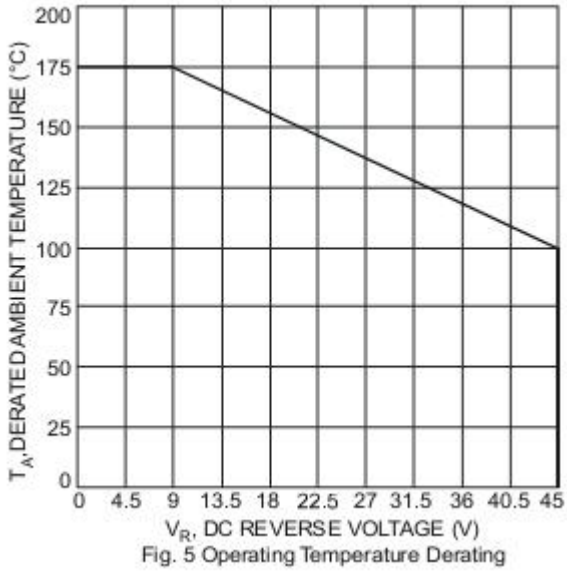


Fig. 5 Operating Temperature Derating

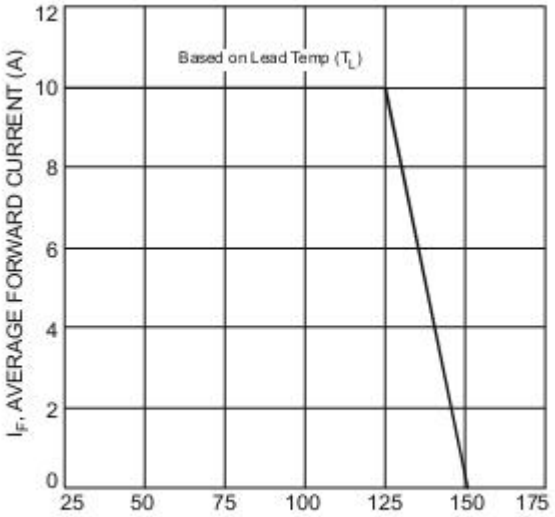
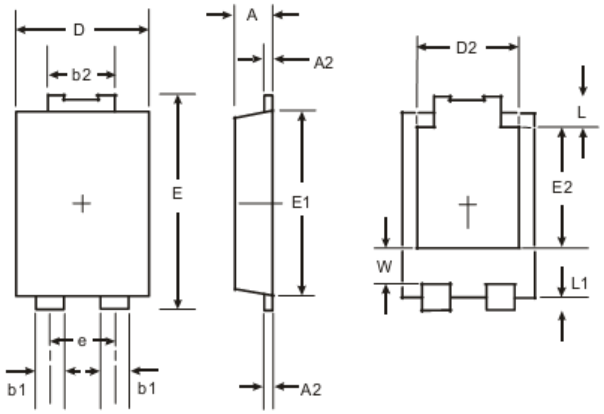


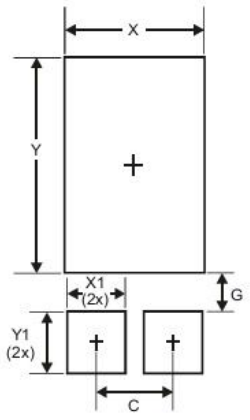
Fig. 6 Forward Current Derating Curve

Package Outline Dimensions



Dim	Min	Max
A	1.05	1.15
A2	0.33	0.43
b1	0.80	0.99
b2	1.70	1.88
D	3.90	4.05
D2	3.054 Typ	
E	6.40	6.60
e	1.84 Typ	
E1	5.30	5.45
E2	3.549 Typ	
L	0.75	0.95
L1	0.50	0.65
W	1.10	1.41
All Dimensions in mm		

Suggested Pad Layout



Dimensions	Value (in mm)
C	1.840
G	0.852
X	3.360
X1	1.390
Y	4.860
Y1	1.400