

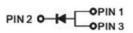
#### **Features**

- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

# Pin 1 TO-277

## **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
SB2045L	TO-277	SB2045L	5000



## **Maximum Ratings (Ta=25°C unless otherwise noted)**

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

Type Number		SB2045L	Units
Maximum Recurrent Peak Reverse Voltage		45	V
Maximum RMS Voltage		32	V
Maximum DC Blocking Voltage	45	V	
Maximum Average Forward Rectified Curren	t		
See Fig. 1		20.0	А
Peak Forward Surge Current, 8.3 ms single h	nalf sine-wave		
superimposed on rated load (JEDEC method)		200	А
Maximum Instantaneous Forward Voltage at 20.0A		0.52	V
Maximum DC Reverse Current	Ta=25°C	0.3	mA
at Rated DC Blocking Voltage	Ta=125°C	20	mA
Typical Junction Capacitance (Note1)		pF	
Typical Thermal Resistance R JA (Note 2)		31	°C/W
Operating Temperature Range T <sub>J</sub>		-65 to +150	°C
Storage Temperature Range Tsтс		-65 to +150	°C

Note: 1.FR-4 PCB, 2oz.Copper.

2.Polymide PCB, 2oz. Copper. Cathode pad dimensions 18.8mm x 14.4mm. Anode pad dimensions 5.6mm x 14.4mm.



# **Typical Characteristics**

Fig. 1 - Forward Power Dissipation

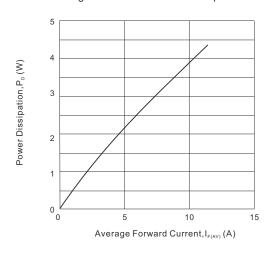


Fig. 3 - Reverse Characteristics

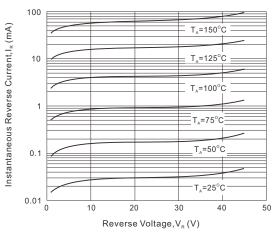


Fig. 5 - Total Capacitance VS.

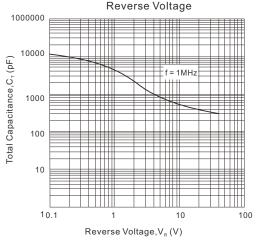


Fig. 2 - Instantaneous Forward Characteristics

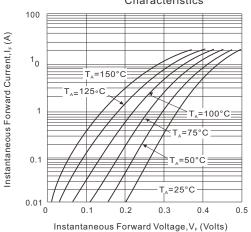


Fig.4 - Forward Current Derating Curve

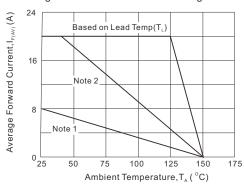
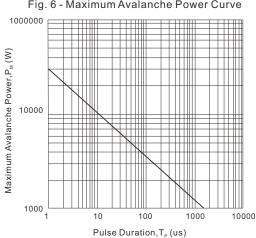
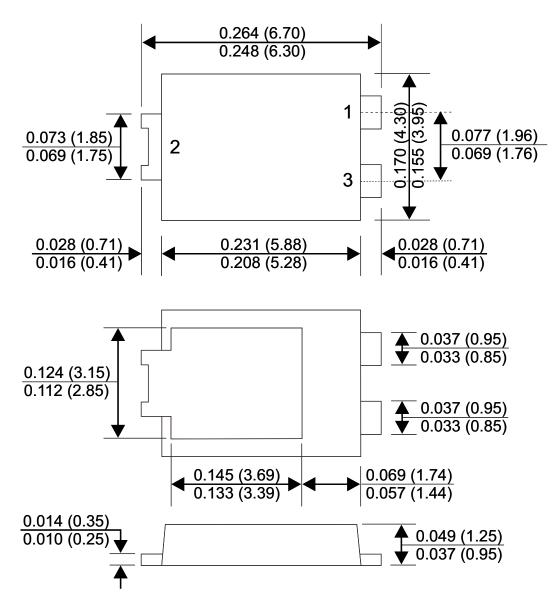


Fig. 6 - Maximum Avalanche Power Curve



## **TO-277 Package Outline Dimensions**



Dimensions in inches and (millimeters)



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