

#### **FEATURES**

- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex.CP10S45SG.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228



### **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
SB1045L.	TO-277	SB1045L.	5000



### MAXIMUM RATINGS (Ta=25 unless otherwise noted)

Rating 25 °C ambient temperature unless otherwies specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

TYPE NUMBER	SB1045L.	UNITS
Maximum Recurrent Peak Reverse Voltage	45	V
Maximum RMS Voltage	32	V
Maximum DC Blocking Voltage	45	V
Maximum Average Forward Rectified Current		
See Fig. 1	10.0	А
Peak Forward Surge Current, 8.3 ms single half sine-wave		
superimposed on rated load (JEDEC method)	150	A
Maximum Instantaneous Forward Voltage at 10.0A	0.53	V
Maximum DC Reverse Current Ta=25°C	0.15	mA
at Rated DC Blocking Voltage Ta=125°C	50	mA
Typical Junction Capacitance (Note1)	570	pF
Typical Thermal Resistance R JA (Note 2)	60	°C/W
Operating Temperature Range T <sub>J</sub>	-50 to +150	°C
Storage Temperature Range Tstg	-50 to +150	°C

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

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



# **Typical Characteristics**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

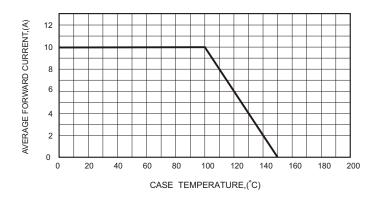


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

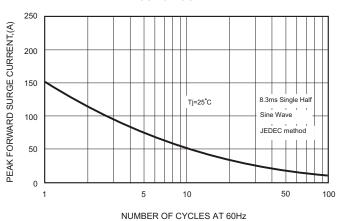


FIG.4-TYPICAL JUNCTION CAPACITANCE

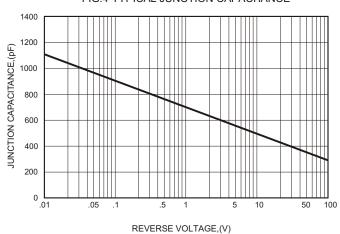


FIG.2-TYPICAL FORWARD

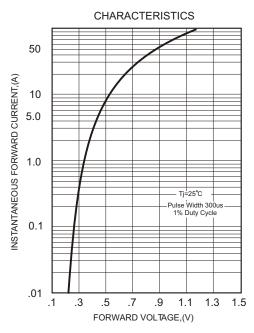
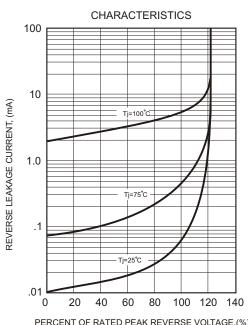


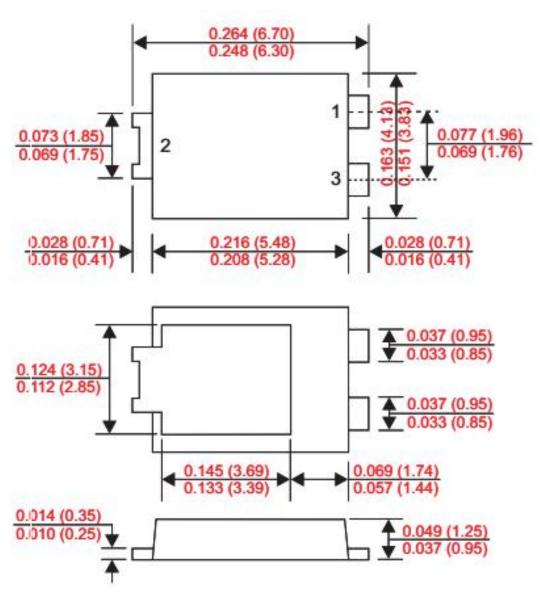
FIG.5 - TYPICAL REVERSE



PERCENT OF RATED PEAK REVERSE VOLTAGE,(%)



# TO-277 Package Outline Dimensions



Dimensions in inches and (millimeters)



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