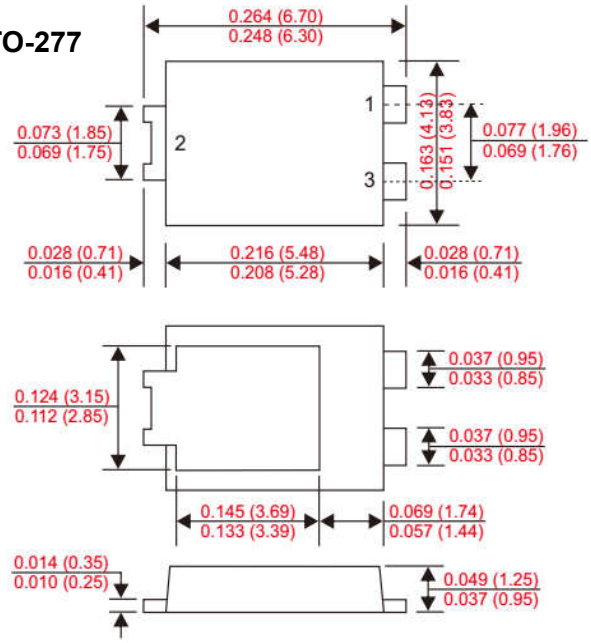
SB1045L

10.0A Surface Mount Trench Schottky Rectifier

VOLTAGE RANGE: 45 Volts
CURRENT: 10.0 Ampere

Bottom View of TO-277 and Schematic

PKG:TO-277



Dimensions in inches and (millimeters)

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

Mechanical Data

* Case: Molded Plastic, TO-277.
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Solder Plated, Solderable per MIL-STD-750, Method 2026.
* Polarity: Indicated by cathode band.
* Mounting position: Any
* Weight:0.106 grams

Maximum Ratings and Electrical Characteristics

Rating 25'C ambient temperature uniess 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	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		200	A
Maximum Instantaneous Forward Voltage at 10.0A		0.45	V
Maximum DC Reverse Current at Rate DC Blocking Voltage	Ta=25'C	0.5	mA
	Ta=100'C	32	mA
Typical Junction Capacitance (Note 1)		300	pF
Typical Thermal Resistance R J_A (Note 2)		60	'C/W
Operating Temperature Range T_J		- 65 ~ + 125	'C
Storage Temperature Range T_{STG}		- 65 ~ + 125	'C

Note: 1 FR-4 PCB. 2oz. Copper
2 Ploymide PCB, 2oz. Copper. Cathode pad dimensions 18.8mmX14.4mm. Anode pad dimensions 5.6mm X 14.4mm .

Typical Characteristics (TJ = 25'C unless otherwise noted)

Fig. 1 - Forward Power Dissipation

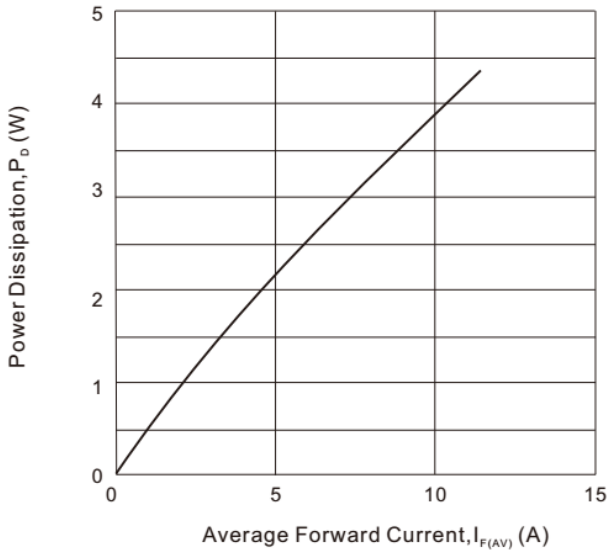


Fig. 2 - Instantaneous Forward Characteristics

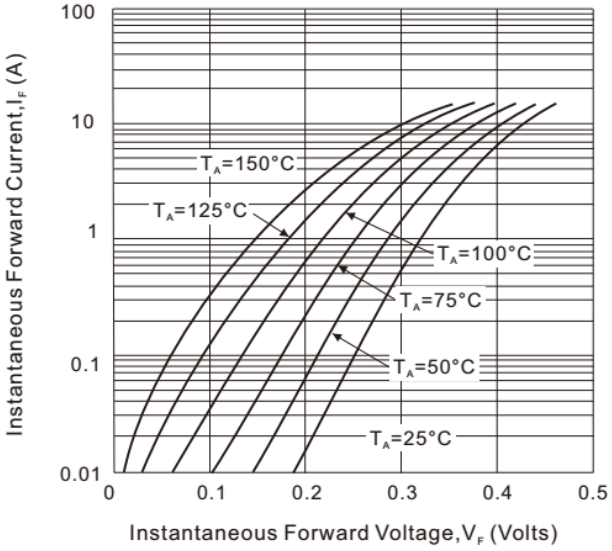


Fig. 3 - Reverse Characteristics

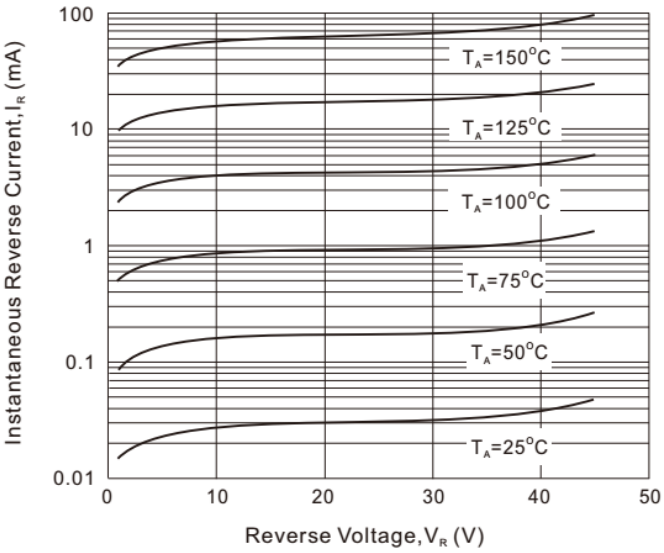


Fig.4 - Forward Current Derating Curve

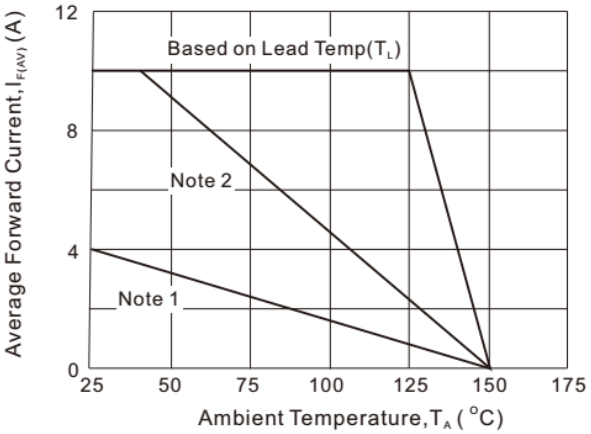


Fig. 5 - Total Capacitance VS. Reverse Voltage

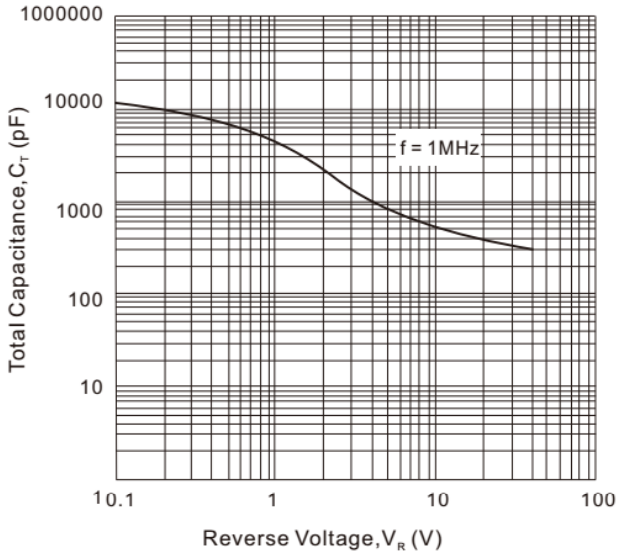


Fig. 6 - Maximum Avalanche Power Curve