

10.0A Surface Mount Trench Schottky Rectifier

VOLTAGE RANGE: 45 Volts

CURRENT: 10.0 Ampere

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

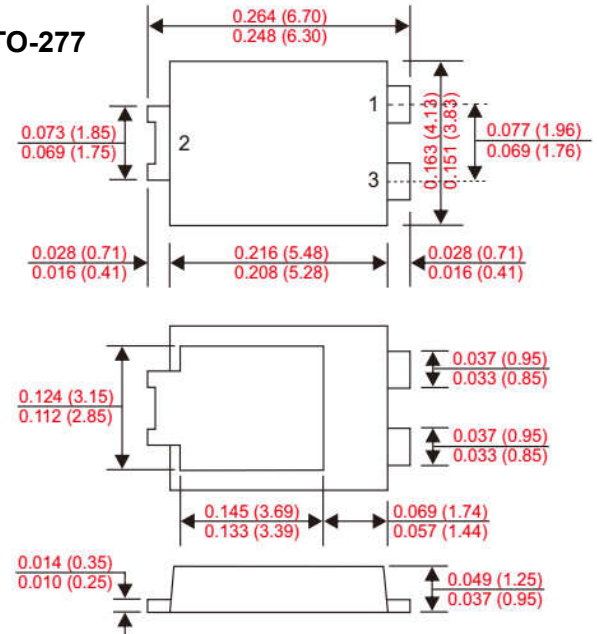
Mechanical Data

- * 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



Bottom View of TO-277 and Schematic

PKG:TO-277



Maximum Ratings and Electrical Characteristics

Rating 25°C ambient temperature unless otherwise 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 JA (Note 2)		60	°C/W
Operating Temperature Range Tj		- 65 ~ + 125	°C
Storage Temperature Range TSTG		- 65 ~ + 125	°C

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

2 Ployimide PCB, 2oz. Copper. Cathode pad dimensions 18.8mmX14.4mm. Anode pad dimensions 5.6mm X 14.4mm .

Typical Characteristics (T_J = 25°C unless otherwise noted)

Fig. 1 - Forward Power Dissipation

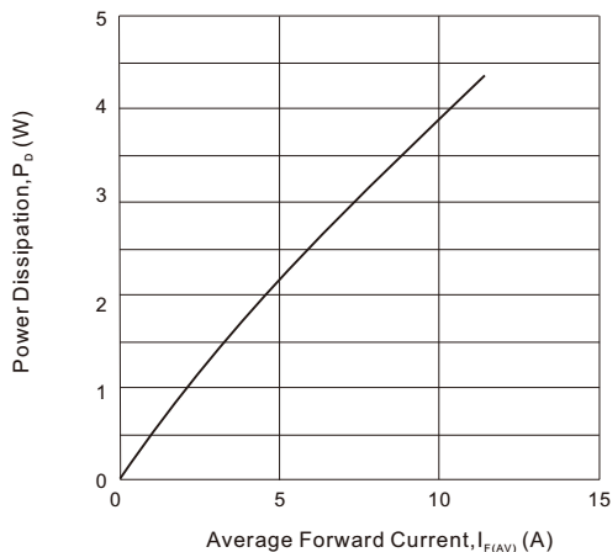


Fig. 2 - Instantaneous Forward Characteristics

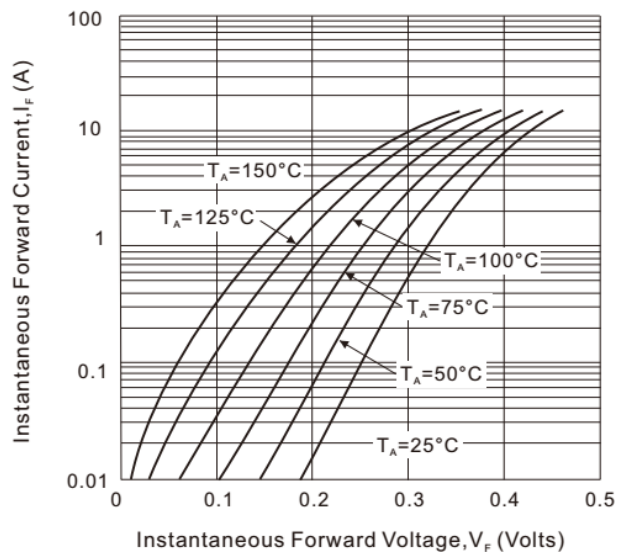


Fig. 3 - Reverse Characteristics

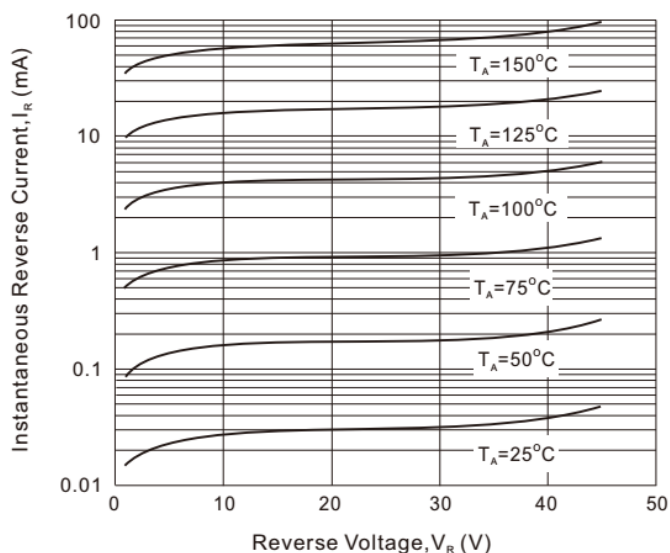


Fig. 4 - Forward Current Derating Curve

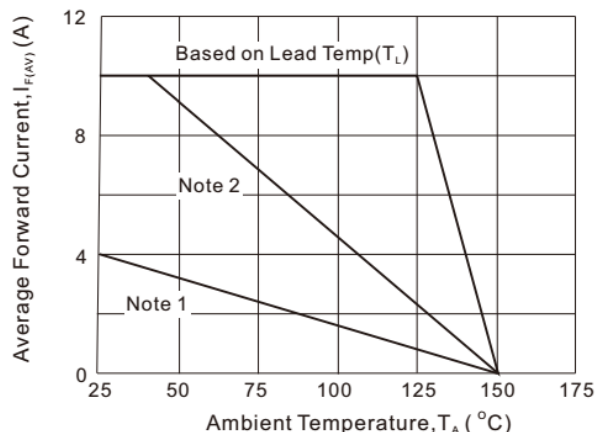


Fig. 5 - Total Capacitance VS. Reverse Voltage

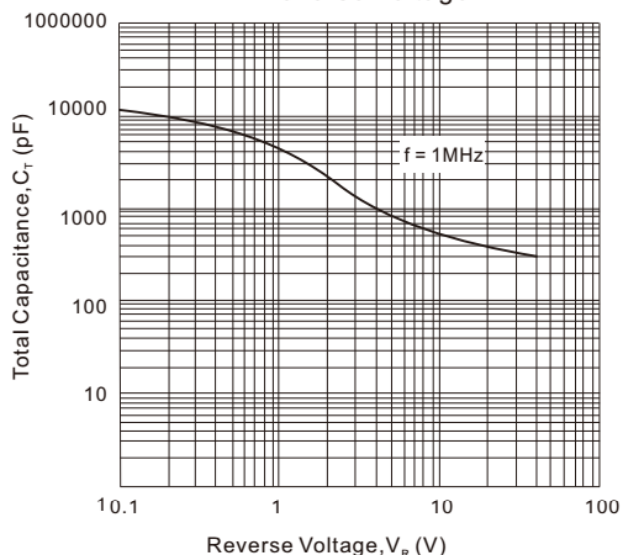


Fig. 6 - Maximum Avalanche Power Curve

