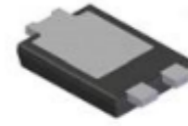


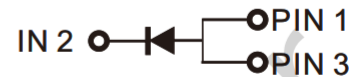
■ Features

- 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

- Epoxy : UL94-V0 rated flame retardant.
- Case : Molded plastic, TO-277.
- Lead : Solder plated, solderable per MIL-STD-750, Method 2026.
- Polarity: Indicated by cathode band.
- Mounting Position : Any.
- Weight : Approximated 0.093 grams.



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	42	V
Maximum DC Blocking Voltage	45	V
Maximum Average Forward Rectified Current See Fig. 1	10.0	A
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	0.6	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)	450	pF
Typical Thermal Resistance R JA (Note 2)	45	°C/W
Operating Temperature Range Tj	— -55 to +150 —	°C
Storage Temperature Range Tstg	-55 to +150	°C

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

RATING AND VCHARACTERISTIC CURVES(SB1045L)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

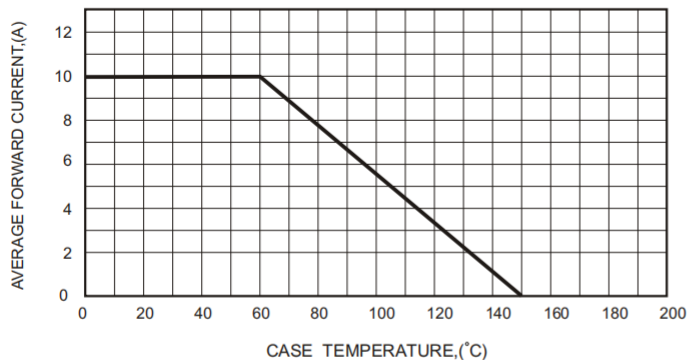


FIG.2-TYPICAL FORWARD CHARACTERISTICS

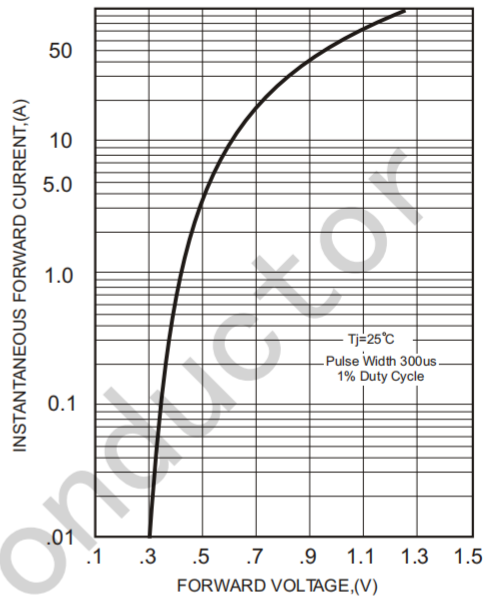


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

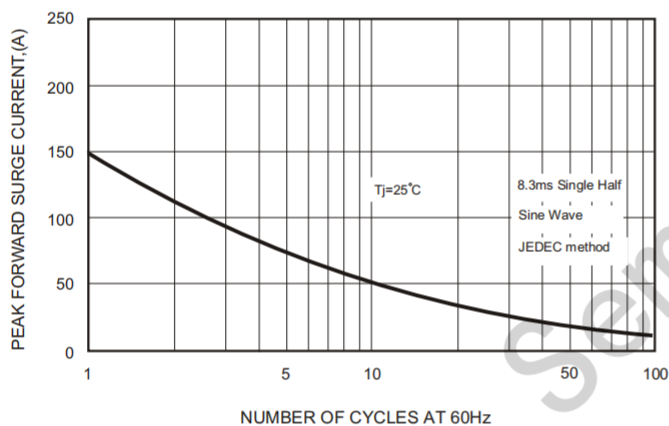


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

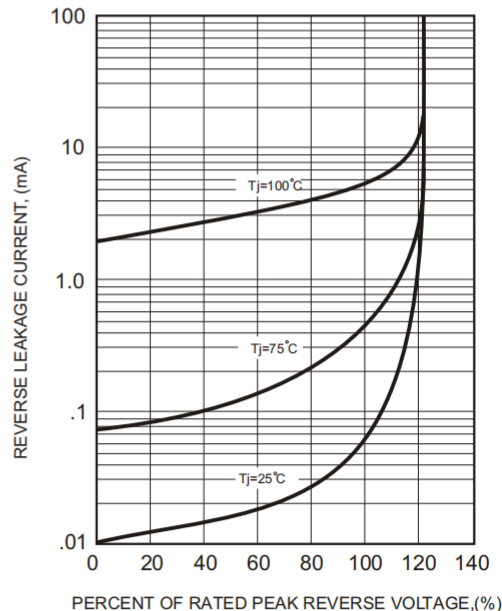
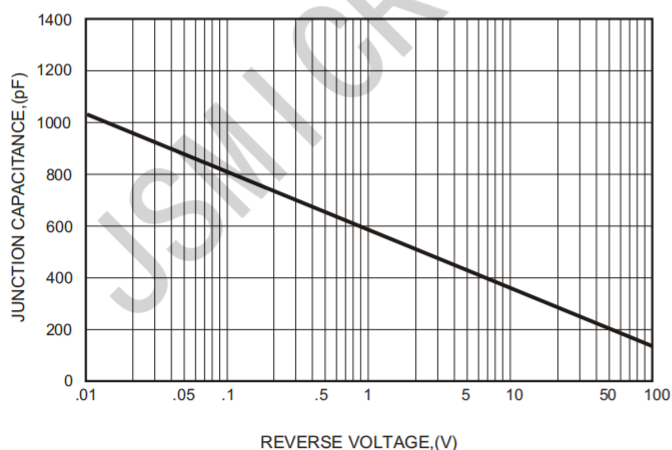


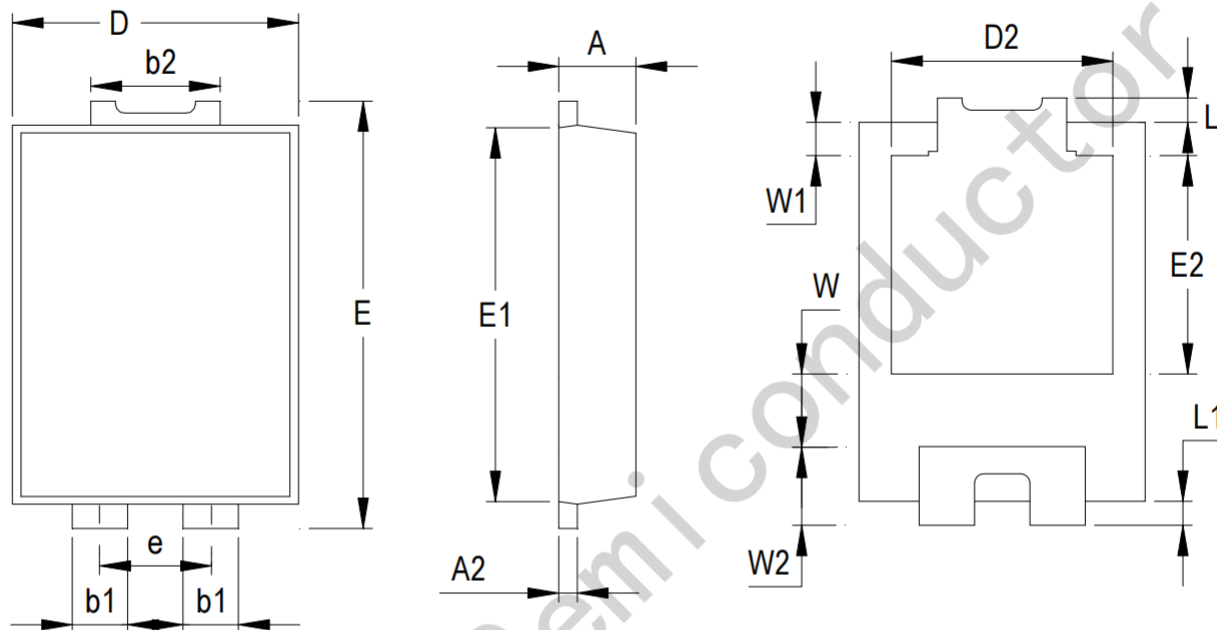
FIG.4-TYPICAL JUNCTION CAPACITANCE



Package Information

TO-277

Units: mm



NO	Dimensions	NO	Dimensions
A	1.25±0.05	e	1.8Typ
A2	0.30±0.02	E1	6.25±0.05
b1	0.9±0.05	E2	3.6±0.2
b2	2.1±0.05	L/L1	0.4±0.05
D	4.65±0.05	W	1.2±0.2
D2	3.60Typ	W1	0.55±0.15
E	7.05±0.1	W2	1.3±0.2
All Dimensions in mm			