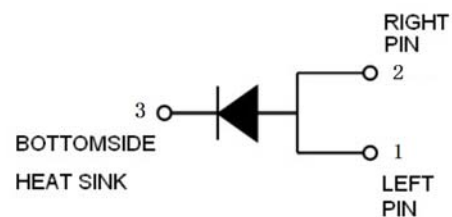


SB2045L

Features:

- ☐ High current capacity, low forward voltage.
- ☐ Excellent high temperature stability.
- ☐ Low power loss, high efficiency
- ☐ High forward surge capacity.
- ☐ RoHS compliant, and Halogen free.

TO-277



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

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Recurrent Peak Reverse Voltage	V_{RRM}	$I_R=0.5mA$	45	-	-	V
Average Forward Current	$I_{F(AV)}$	$V_R=45V@T_j=25^{\circ}C$	-	20	-	A
Peak Forward Surge Current, 8.3ms single half sine-wave	I_{FSM}	$V_R=45V@T_j=25^{\circ}C$	-	-	200	A
Forward Voltage(Note1)	V_F	$I_F=10A$	-	0.45	-	V
		$I_F=15A$	-	0.48	-	
		$I_F=20A$	-	-	0.52	
Reverse Leakage Current(Note1)	I_R	$V_R=45V@T_j=25^{\circ}C$	-	-	0.20	mA
		$V_R=45V@T_j=100^{\circ}C$	-	-	20	
Operating Junction Temperature	T_j	-	-	-	150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-	-40	-	150	
Thermal Resistance(Note2)	$R_{th(JA)}$	-	-	31	-	$^{\circ}C/W$

Note 1: Pulse test width PW=300usec. 1%duty cycle

Note 2: Polymide PCB, 2oz. copper. Cathode pad dimensions 18.8*14.4mm. Anode pad dimensions 5.6*14.1mm

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

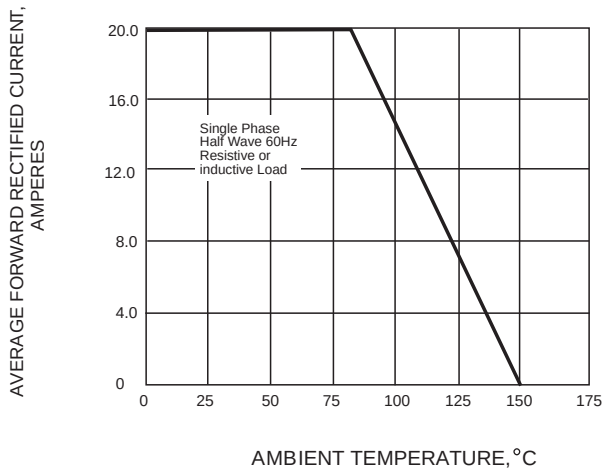


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

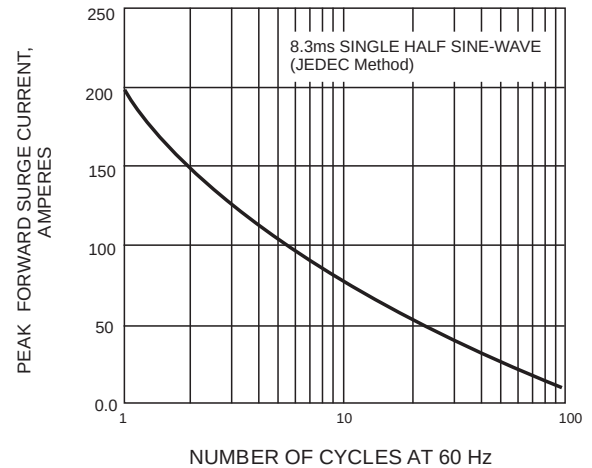


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

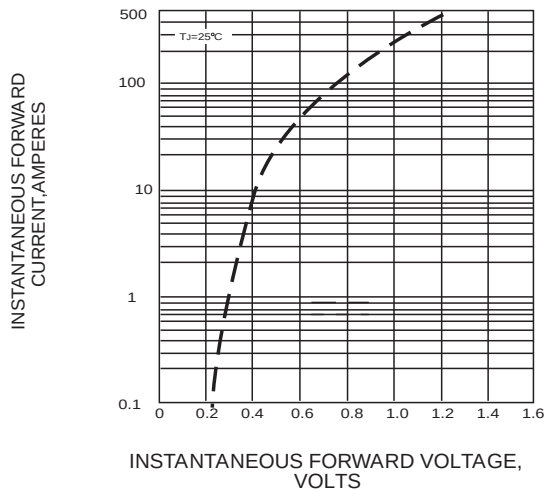
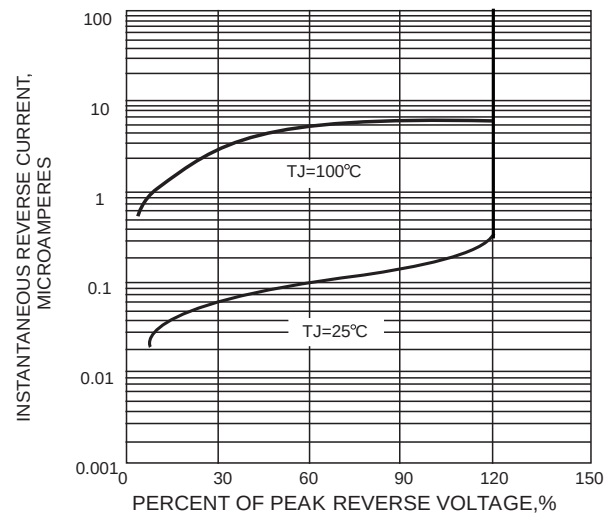


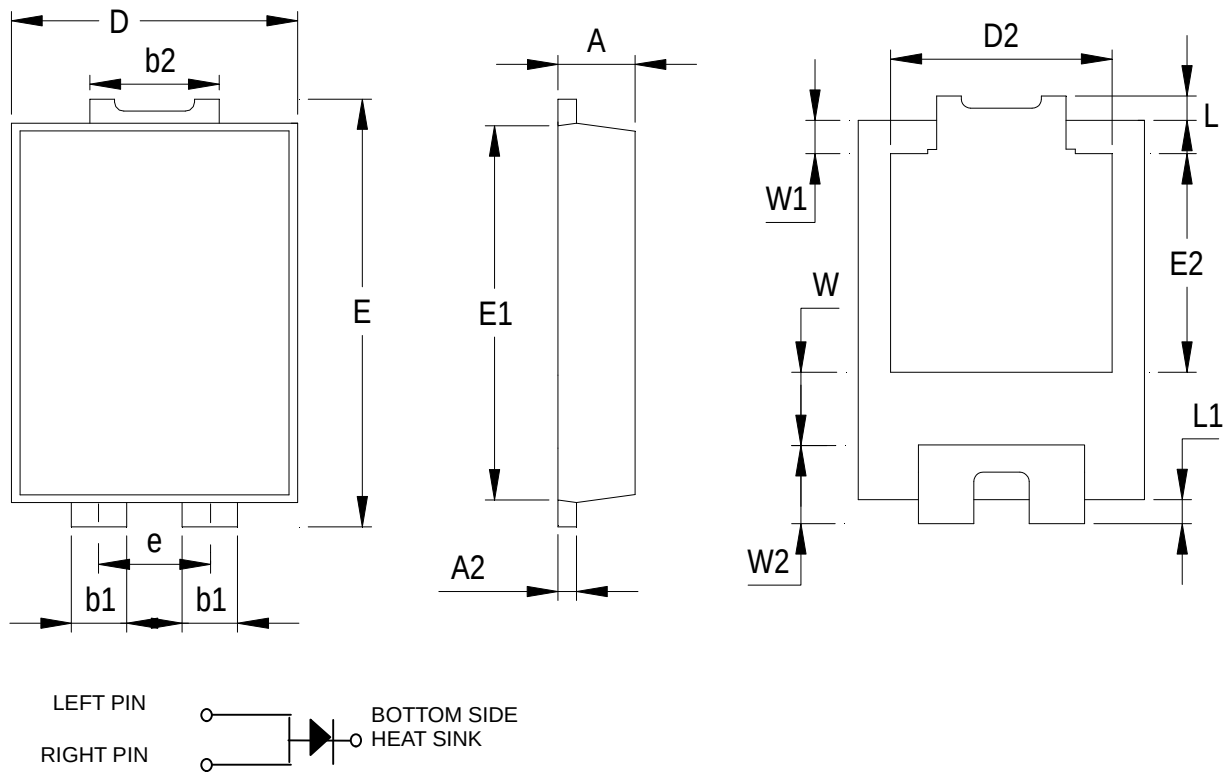
FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Package Dimension

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			