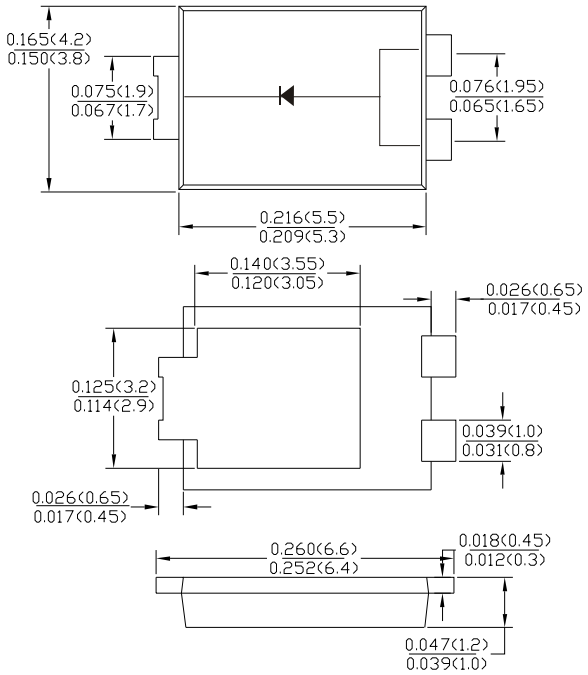
SB2045L

20.0A SCHOTTKY BARRIER RECTIFIER

TO-277



Dimiensions inches and milimenters

Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Fow Power Loss,High Efficiency
- Excellent High Temperature Stability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case:TO-277 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.093 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	SB2045L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	45	V
RMS Reverse Voltage	$V_{R(RMS)}$	32	V
Average Rectified Output Current (Note 1)	I_O	20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	250	A
Forward Voltage Drop @I_F = 2 A, Tj = 25°C @I_F = 20A, Tj = 25°C	V_{FM}	0.33 0.55	V
@I_F = 2 A, Tj = 100°C @I_F = 20A, Tj = 100°C		0.28 0.48	
Peak Reverse Current @V_F = 45V , Tj = 25°C At Rated DC Blocking Voltage @V_F = 45V, Tj = 100°C	I_{RM}	0.2 20	mA
Typical Thermal Resistance Junction to Ambient (Note 2) (Note 3)	$R_{\theta JA}$	28 18	°C/W
Operating Temperature Range @V_R ≤ 80% V_{RRM} DC Forward Mode	T_j	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
2. FR-4 PCB, 2oz. Copper, minimum recommended pad layout .
3. Polymide PCB, 2oz. Copper. Cathode pad dimensions 18.8mm x 14.4mm. Anode pad dimensions 5.6mm x 14.4mm.

20.0A SCHOTTKY BARRIER RECTIFIER **SB2045L**

Fig.1 - Forward Current Derating Curve

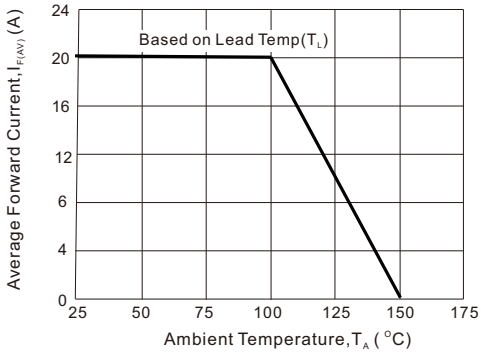


Fig2: Surge Forward Current Capadility

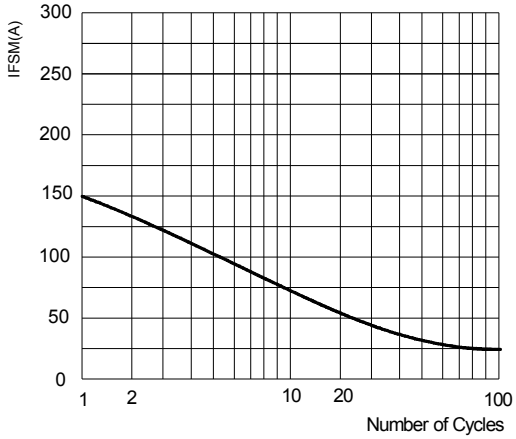
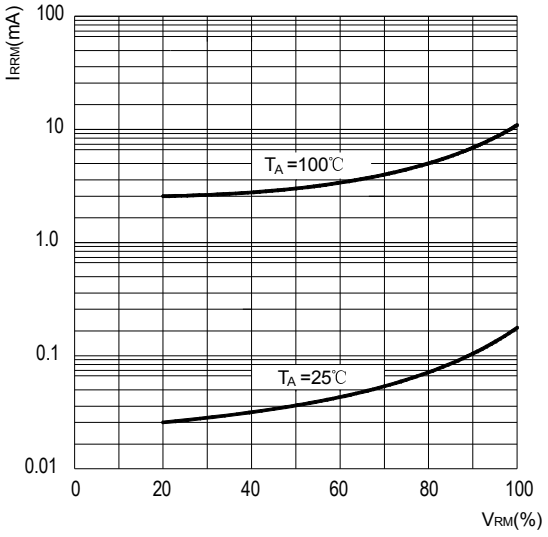


Fig3: Typical Reverse Characteristics



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!