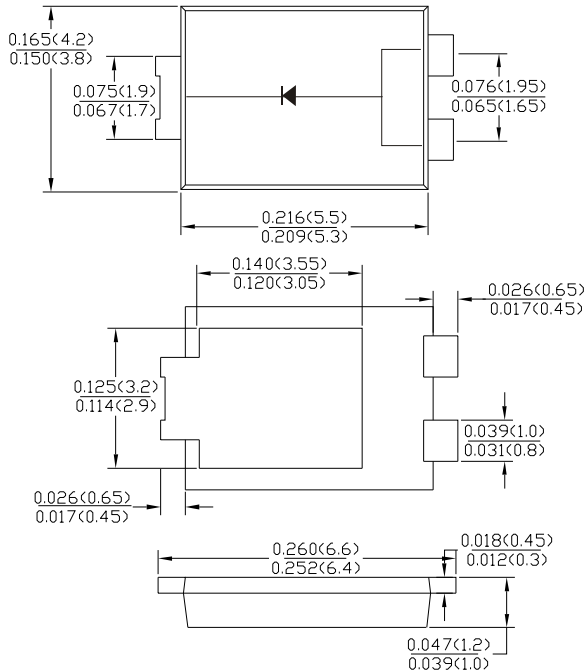




SB2045L

20.0A SCHOTTKY BARRIER RECTIFIER

T0-277



Dimensions inches and millimeters

Features

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

Mechanical Data

- Case: T0-277 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, T _J = 25°C @I _F = 20 A, T _J = 100°C	V _{FM}	0.33 0.55 0.28 0.48	V
Peak Reverse Current At Rated DC Blocking Voltage @V _R = 45V, T _J = 25°C @V _R = 45V, T _J = 100°C	I _{RM}	0.2 20	mA
Typical Thermal Resistance Junction to Ambient (Note 2) (Note 3)	R _{θJA}	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. Polyimide PCB, 2oz. Copper. Cathode pad dimensions 18.8mm x 14.4mm. Anode pad dimensions 5.6mm x 14.4mm.



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20.0A SCHOTTKY BARRIER RECTIFIER SB2045L

Fig.1 - Forward Current Derating Curve

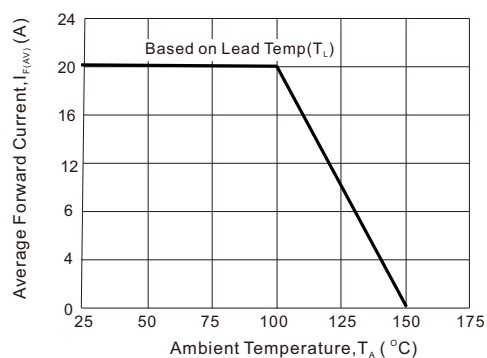


Fig2: Surge Forward Current Capability

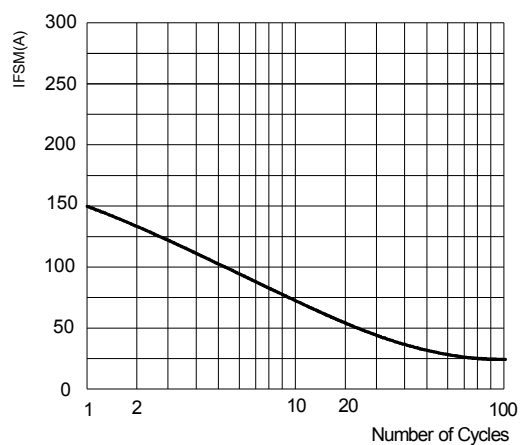
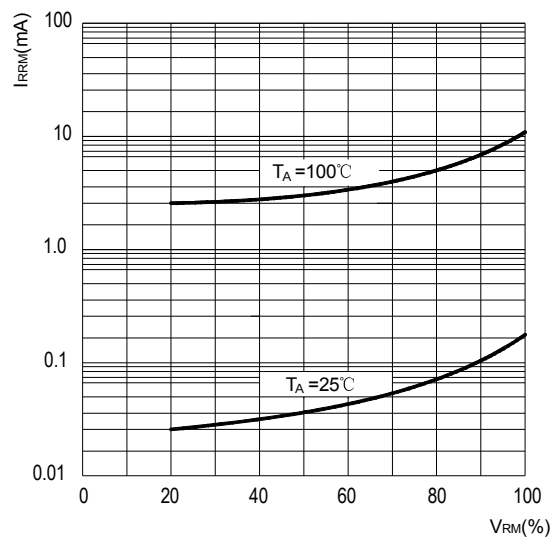


Fig3: Typical Reverse Characteristics



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

