Zibo Seno Electronic Engineering Co., Ltd.

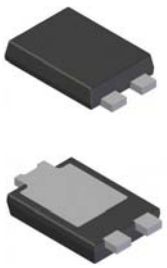
淄博圣诺

SB20T80L - SB20T200L

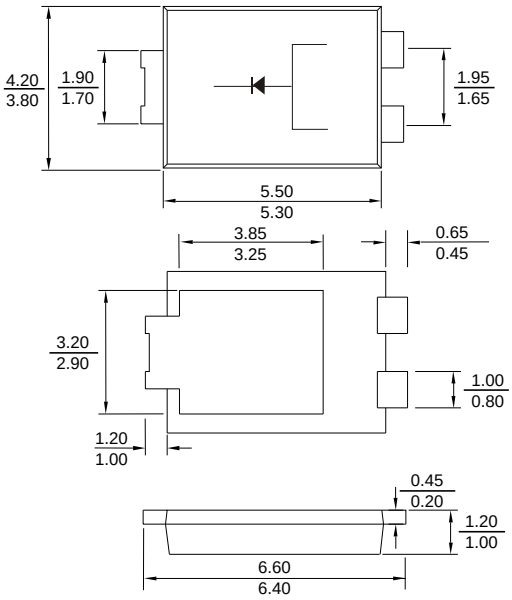
20.0 A SUPER BARRIER RECTIFIER

Features

- Schottky Barrier Chip
- Bypass Diodes for Solar Panels
- High Junction Temperture
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Foward Surge Capability
- Ultra Low Power Loss, High Efficiency
- Excellent High Temperature Stability



TO-277B



Dimensions in millimeters

Mechanical Data

- Case:TO-277B Molded Plastic "Green" Molding Compound
- 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	SB20T80L	SB20T100L	SB20T120L	SB20T150L	SB20T200L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	80	100	120	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	56	70	84	105	140	V
Average Rectified Output Current @T_L = 100°C (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
I^2t Rating for Fusing (t<8.3ms)	I^2t	259.4					A^2s
Forward Voltage Drop T_A = 25°C @I_F = 1.0A T_A = 25°C @I_F = 5.0A T_A = 25°C @I_F = 10A	V_{FM}	Typ. Max. 0.46 - 0.52 - 0.66 0.71	Typ. Max. 0.48 - 0.55 - 0.69 0.75	0.85	Typ. Max. 0.50 - 0.75 - 0.87 0.92	0.92	V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	0.3 15					mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	110					°C/W
Operating and Storage Temperature Range	T_j, 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.

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FIG.1 - FORWARD CURRENT DERATING CURVE

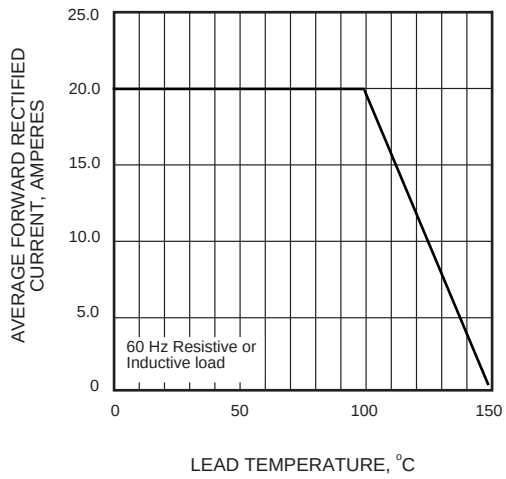


FIG.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

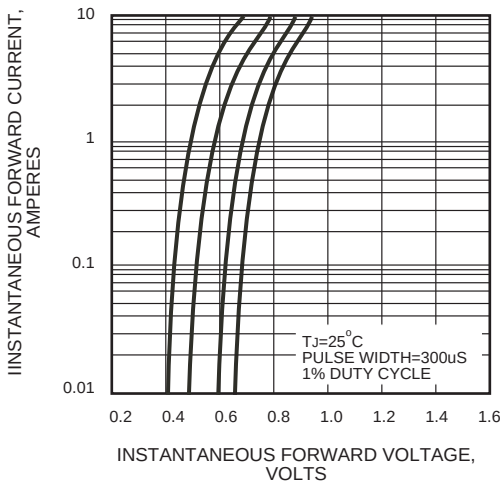


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

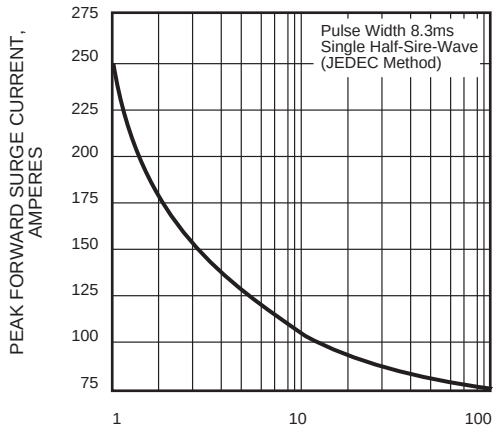


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

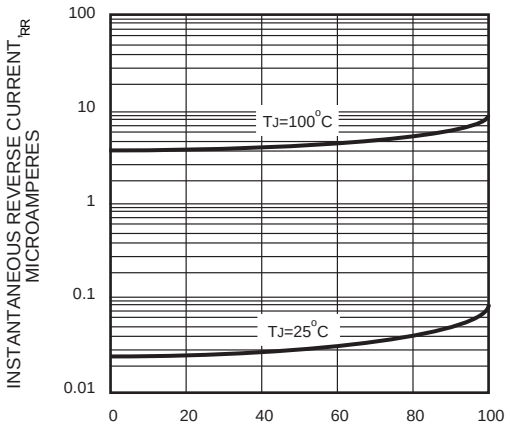
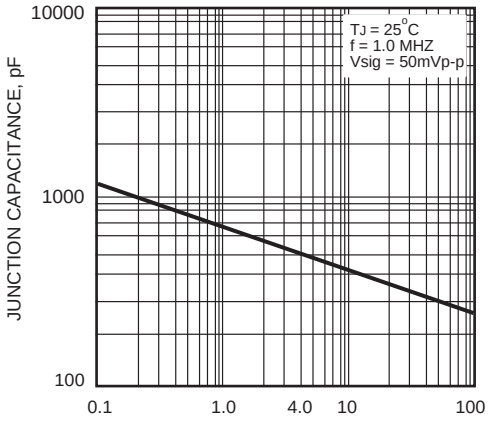


FIG.5 - TYPICAL JUNCTION CAPACITANCE



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