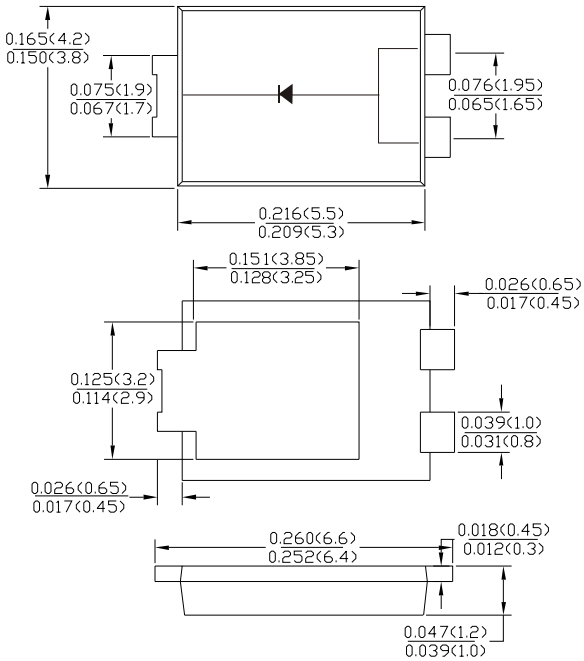
SB1045L THRU SB10100L

10A Surface Mount Schottky Barrier Rectifiers

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

TO-277B



dimensions in inches and (millimeters)

Mechanical Data

- Case: TO-277B, molded plastic
- Terminals:Plated Leads Solderable per MIL-STD-202,Method 208
- Polarity:Cathode Band
- Mounting Position:Any
- Marking:Type Number
- Lead Free:For RoHS/Lead Free Version

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

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

Parameter	Symbol	SB1045L	SB1050L	SB1060L	SB1080L	SB10100L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC blocking voltage	V_{RRM} V_{RWM} V_{DC}	45	50	60	80	100	V
RMS Rectified Voltage	$V_{R(RMS)}$	32	35	42	56	70	V
Average Rectified Output Current (Note1)	IF(AV)	10					A
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2)	I_{FSM}	150					A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	93.5					A^2s
Forward Voltage Drop T_A =25 ℃ @IF=10A	V_{FM}	0.44		0.52	0.70		V
Peak Reverse Curent T_A =25℃ At Rated DC Blocking Voltage T_A =100℃	I_R	0.3 15					mA
Typical Thermal Resistance Junctionto Ambient	$R_{\theta JA}$ $R_{\theta JL}$	80 15					℃/W
Operating junction temperature range	T_J	-55 to +150					℃
storage temperature range	T_{STG}	-55 to +150					℃

Note:1.Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.
2.Fr-4pcb.2oz.Copper,minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.

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SB1045L THRU SB10100L

10A Surface Mount Schottky Barrier Rectifiers

Fig.1 - Forward Current Derating Curve

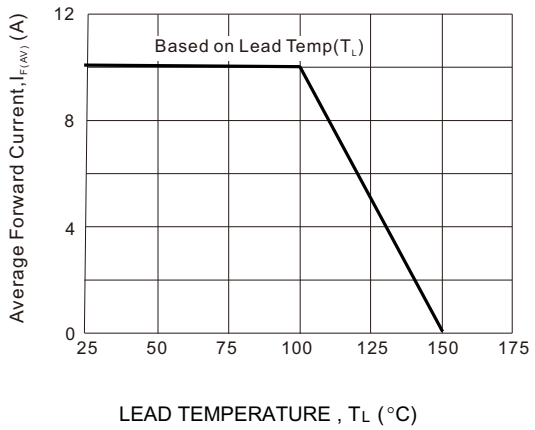


Fig2 : Instantaneous Forward Voltage

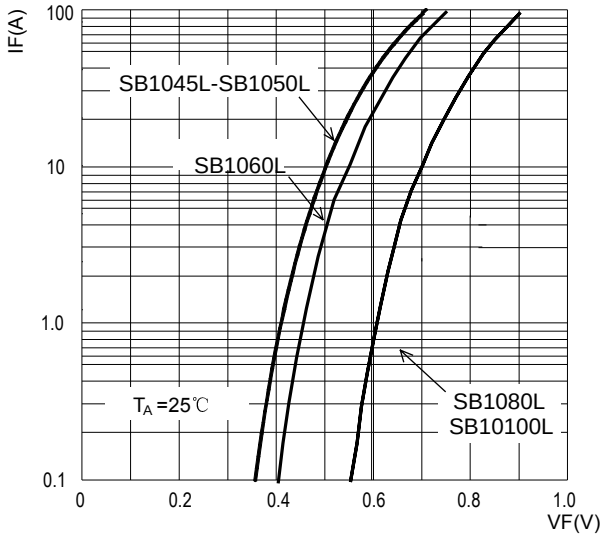


Fig3: Surge Forward Current Capadility

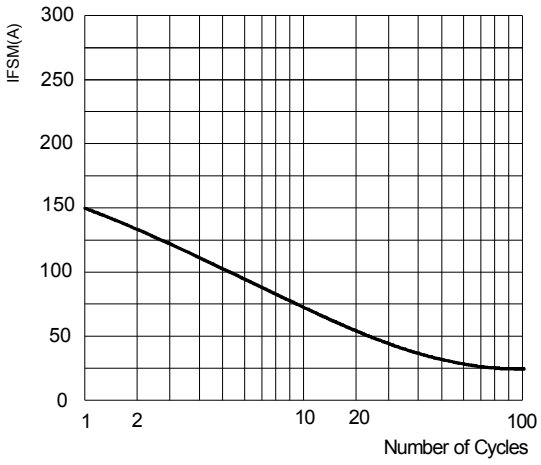


Fig4: Typical Reverse Characteristics

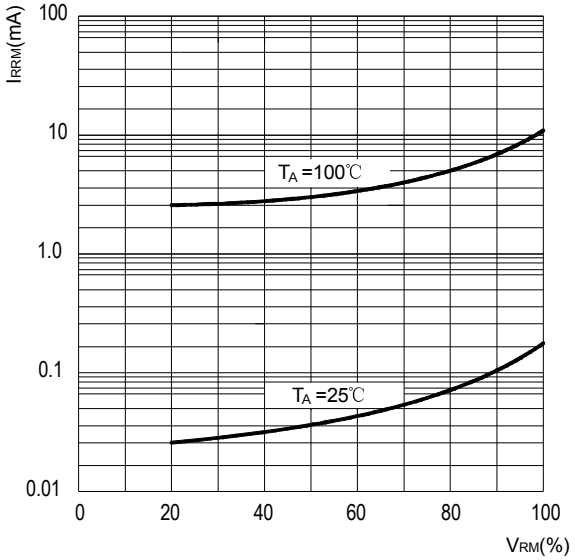
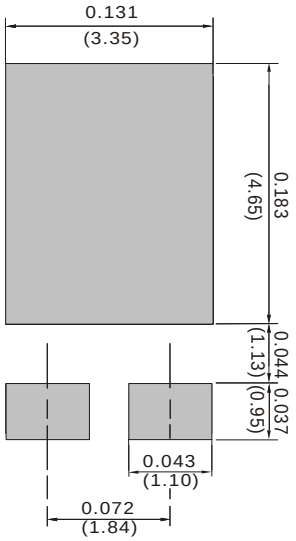


FIG.5 MOUNTING PAD LAYOUT



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