FutureWafer Evolution

SBS3JL

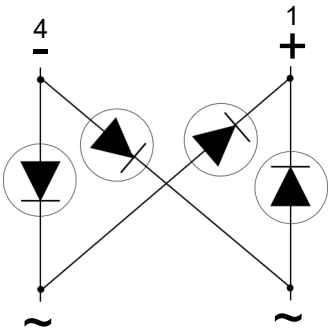
Extra Low Leakage Current Schottky Bridge Rectifier

1. Feature

- Extra Low Leakage<2uA@VR=100V
- Surge Overload Rating:75A Peak
- High Efficiency,Low Power Loss
- Low Forward Voltage Drop



ABS



2. Mechanical Characteristics

- Case: ABS,Molded plastic
- Packing: Tape and Reel
- Flammability Rating UL 94V-0
- Marking Code:S3JL

3. Device Characteristics

Maximum Ratings@25°C unless otherwise specified

Parameter		Symbol	Ratings	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Maximum RMS Voltage		V_{RMS}	70	
Maximum DC Blocking Voltage		V_{DC}	100	
Maximum Average Forward Rectified Current @ TA = 40°C		$I_{F(AV)}$	3.0 on Aluminum substrate	A
Peak Forward Surge Current,8.3ms Single Half Sine-Wave Superimposed on Rated Load		I_{FSM}	75	
Maximum forward voltage	IF = 1.5 A	V_F	0.75	V
	IF = 3.0 A		0.85	
Maximum reverse Current	TA = 25°C	I_R	2.0	uA
	TA = 125°C		500	
Typical thermal resistance	Junction to Lead	$R_{\theta JL}$	20	°C/W
	Junction to Ambient	$R_{\theta JA}$	70	
Operating Temperature		T_J	-55~150	°C
Storage Temperature		T_{STG}		

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4. Rating and Characteristic Curve

Fig.1 Forward Current Derating Curve

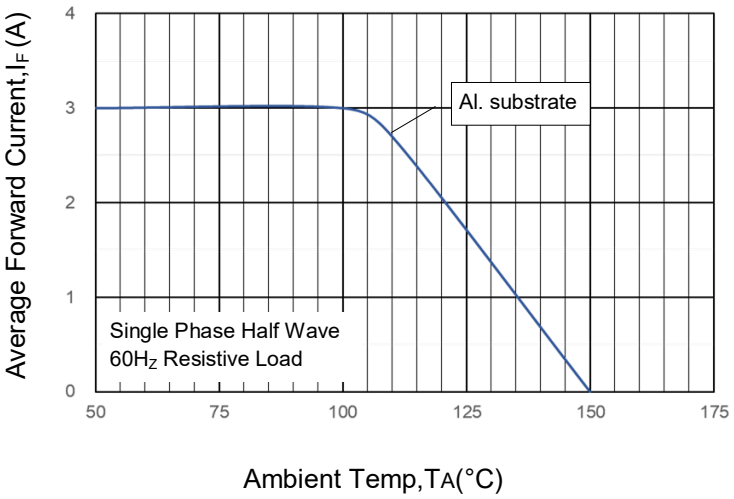


Fig. 2 Typical Forward Characteristics

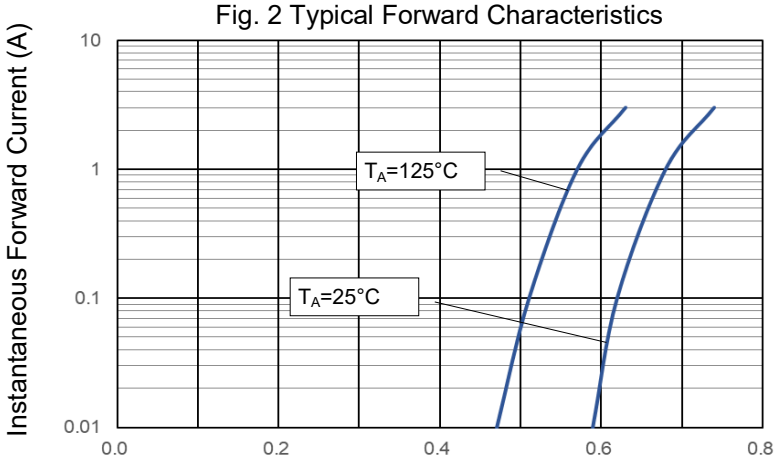


Fig.3 Maximum Non-Repetitive Forward Surge Current

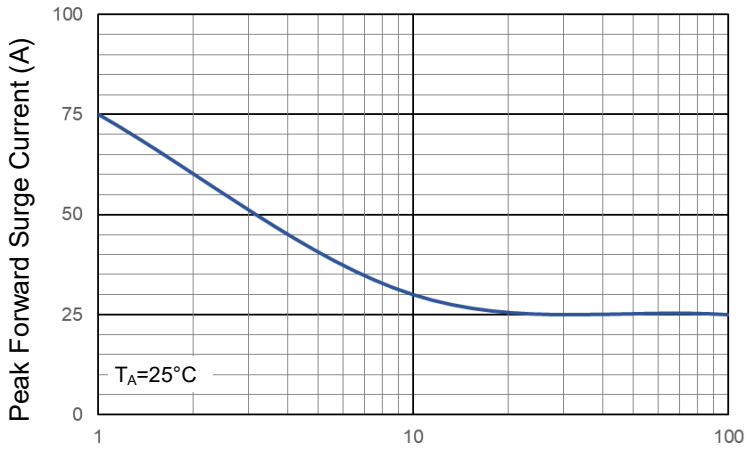
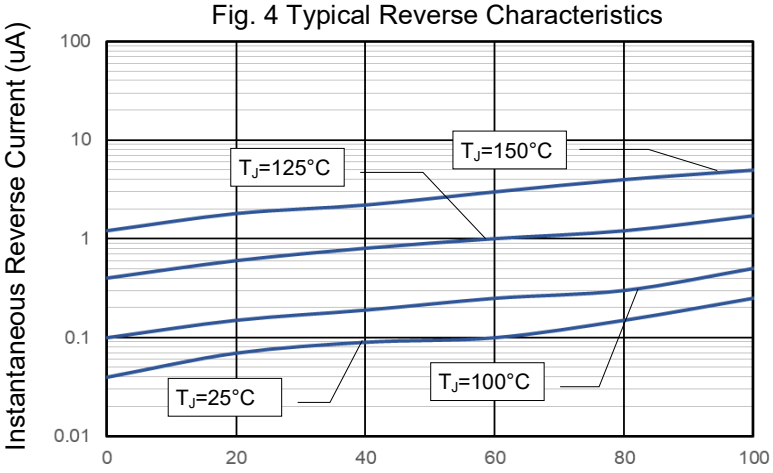


Fig. 4 Typical Reverse Characteristics



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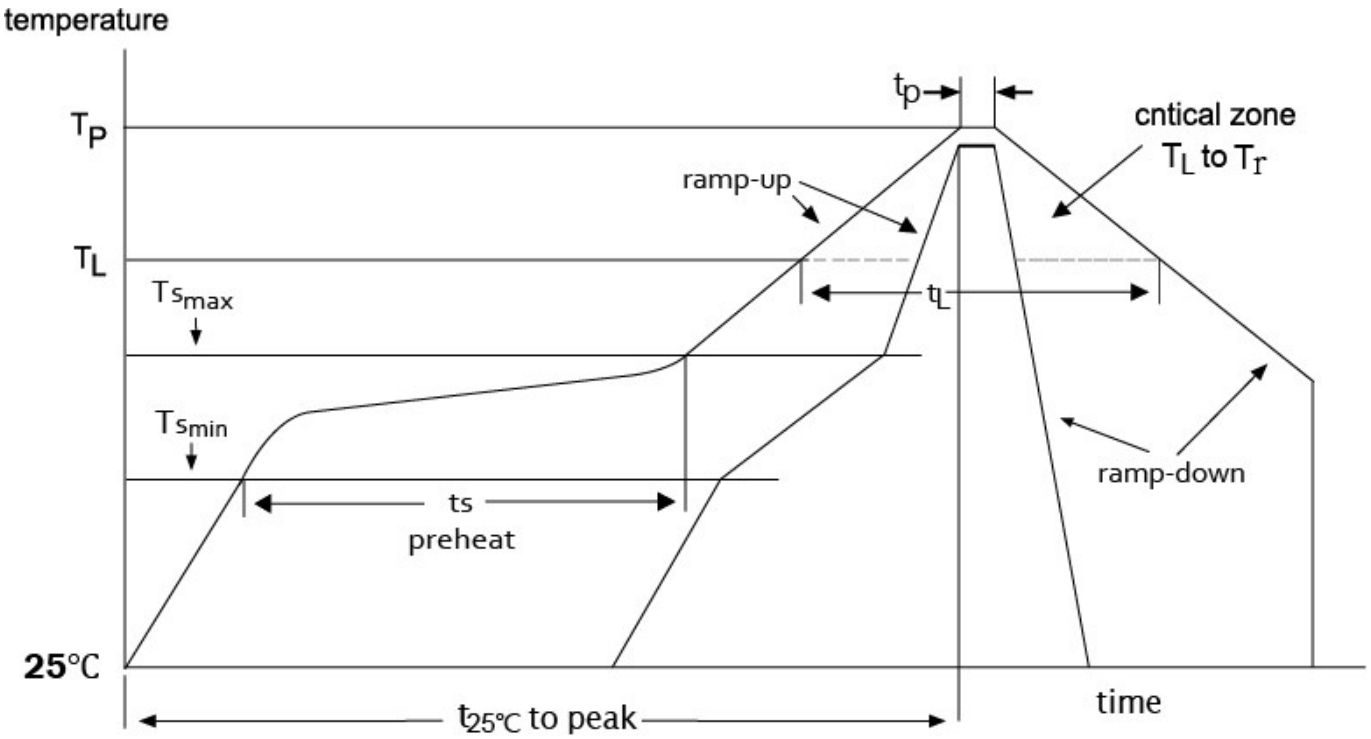
5. Soldering Parameters

Profile Feature	SnPb eutectic assembly	Pb-free assembly
Average ramp-up rate (Tsmax to Tp)	3 °C/s maximum	3 °C/s maximum
Preheat		
Temperature minimum (Tsmin)	100 °C	150 °C
Temperature maximum (Tsmax)	150 °C	200 °C
Time (tsmin to tsmax)	60 s to 120 s	60 s to 180 s
Time maintained above		
Temperature (TL)	183 °C	217 °C
Time (tL)	60 s to 150 s	60 s to 150 s
Peak/classificationtemperature(T)	235 °C	260 °C
Number of allowed reflow cycles	3	3
Time within 5 °C of actual peak temperature (tp)	10 s to 30 s	20 s to 40 s
Ramp-down rate	6 °C/s maximum	6 °C/s maximum
Time 25 °C to peak temperature	6 minutes maximum	8 minutes maximum



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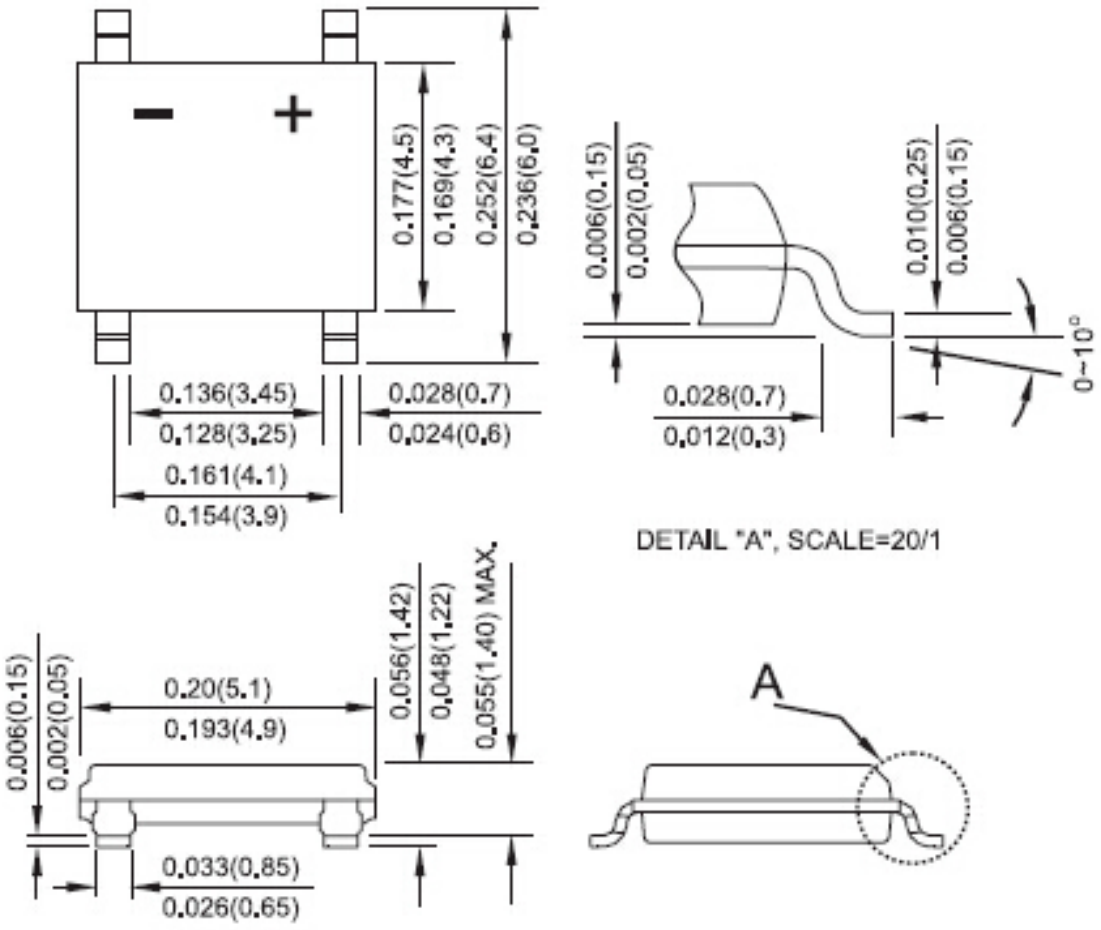
6. Package Information



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7. Ordering information

Part No.	Marking	Unit weight (g)	Quantity	Delivery Mode
SBS3JL	S3JL	0.095	4,000pcs	13” Tape and Reel

8. History

Version	Date	File No.	Recording	Basis
A	29-Nov-2018	F418488	New create	Market
B	27-Oct-2020		Update version	System
2.0	14-Mar-2021		Update version	System

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