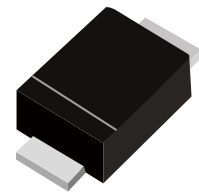
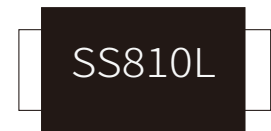


FEATURES

- | For Surface Mounted Applications
- | Built-in Strain Relief, ideal For Automated Placement
- | Low Forward Voltage
- | High Forward Surge Current Capability
- | The Plastic Package Carries Underwriters Laboratory Flammability Classification 94V-0



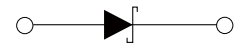
SMBF



Marking

MECHANICAL DATA

- | Case : Molded Plastic Body
- | Polarity : Polarity Symbol Marking On Body
- | Mounting Position : Any



Schematic Symbol

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS (T_A=25°C)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Maximum RMS Voltage	V _{RMS}	70	V
Maximum DC Blocking Voltage	V _{DC}	100	V
Maximum Average Forward Rectified Current at T _L =100°C	I _(AV)	8.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I _{FSM}	150.0	A
Typical Thermal Resistance	R _{θJA}	75	°C/W
	R _{θJL}	18	°C/W
Operating Temperature Range	T _J	-55 to 150	°C
Storage Temperature Range	T _{STG}	-55 to 150	°C

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage at 8.0A	V_F	0.60	0.65	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^{\circ}\text{C}$	5	μA
		$T_A=100^{\circ}\text{C}$	2	mA

CHARACTERISTIC CURVES

Fig.1 Derating Curve Output Rectified Current

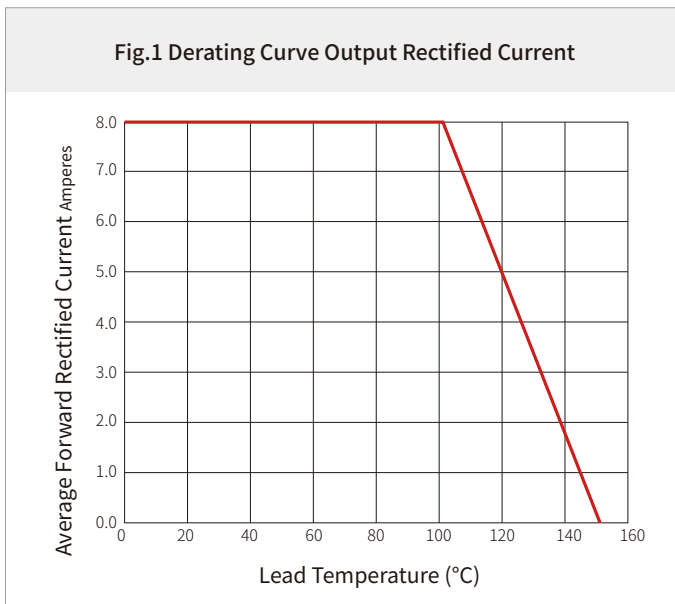


Fig.2 Maximum Non-repetitive Peak Forward Surge Current Perleg

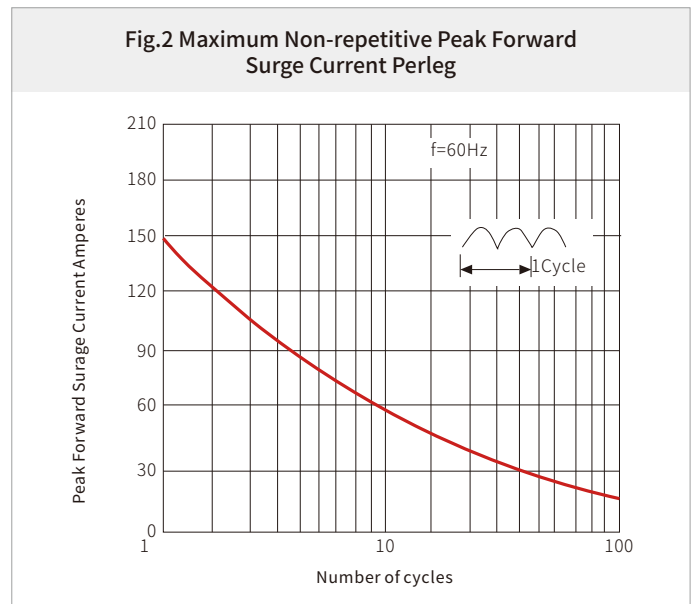
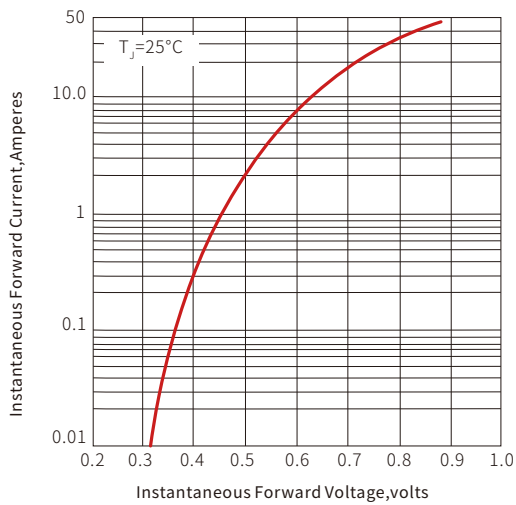
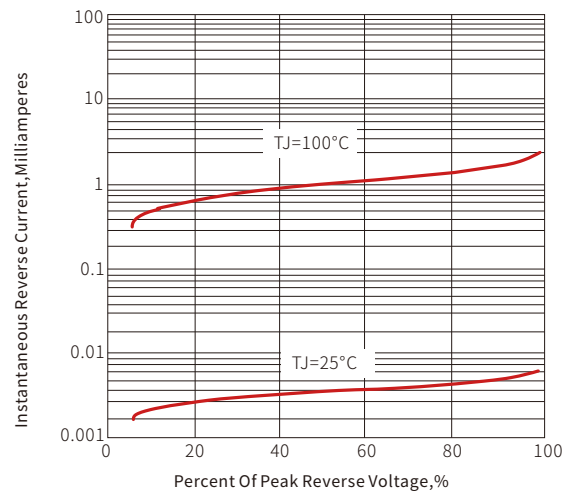
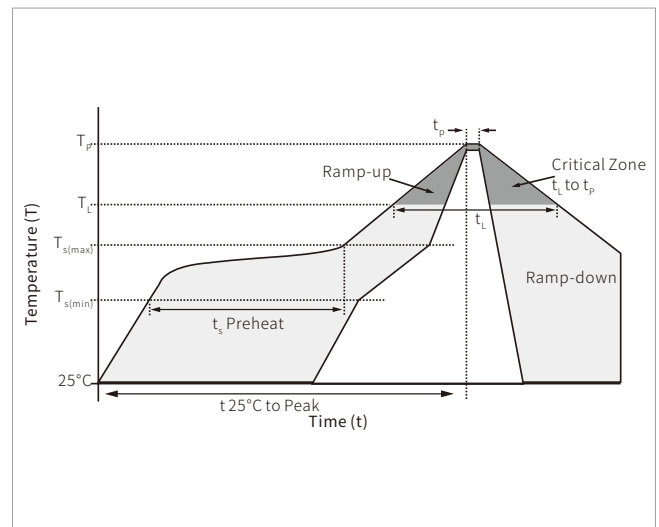


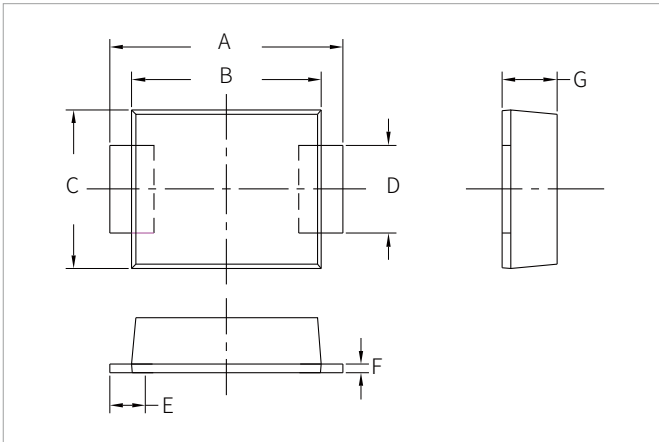
Fig.3 Typical Forward Voltage Characteristics

Fig.4 Typical Reverse Leakage Characteristics


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(\min)}$)	150°C
	Temperature Max ($T_{s(\max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(\max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

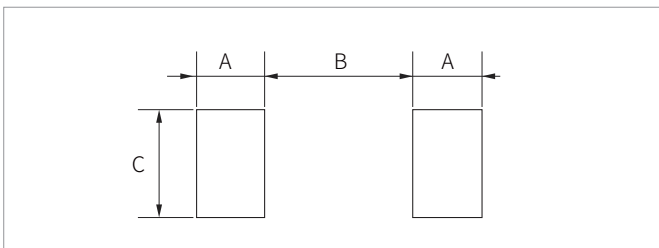


SMBF PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.10	5.50	0.201	0.217
B	4.10	4.50	0.161	0.177
C	3.40	3.80	0.134	0.150
D	1.90	2.10	0.075	0.083
E	0.70	-	0.028	-
F	0.15	0.25	0.006	0.010
G	1.00	2.20	0.039	0.087

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.0	-	0.079	-
B	-	2.5	-	0.098
C	2.2	-	0.087	-

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SS810LBF	SMBF	3000PCS	13"

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By QR Code

Website



Wechat

To find your local partner within Semiware's global website: www.semiware.com

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