

SSL56B~SSL510B

Rev. A Feb.-2019

/ Descriptions

60V~100V

5.0A

SMB

Surface Mount Schottky Barrier Rectifiers, Reverse Voltage 60 to 100V, Forward Current: 5.0A, SMB package.

/ Features

Low power loss, High efficiency, High forward surge current capability, For surface mounted applications. HF product.

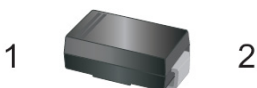
/ Applications

General purpose.

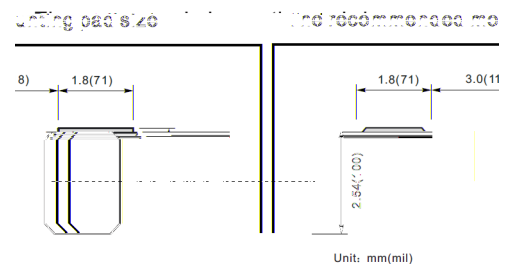
/ Equivalent Circuit



/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating		Unit
		SSL56B	SSL510B	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	100	V
Maximum RMS voltage	V_{RMS}	42	70	V
Maximum DC Blocking Voltage	V_{DC}	60	100	V
Maximum Average Forward Rectified Current	$I_F (AV)$	5.0		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150		A
Typical Junction Capacitance ¹	C_j	600		pF
Typical Thermal Resistance ²	$R_{\theta JA}$	45		°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150		°C

Note:

- 1 Measured at 1 MHz and applied reverse voltage of 4 V D.C
- 2 P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	数值 Rating		Unit
			SSL56B	SSL510B	
Maximum Instantaneous Forward Voltage	V_F	$I_F=5.0A$	0.5	0.6	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	$T_a=25^{\circ}C$	1.0		mA
		$T_a=100^{\circ}C$	50		mA



/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

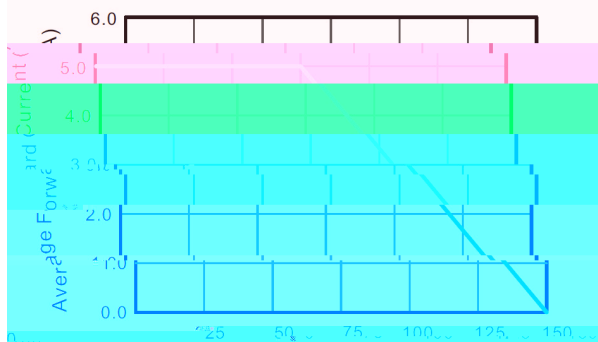


Fig.2 Typical Reverse Characteristics

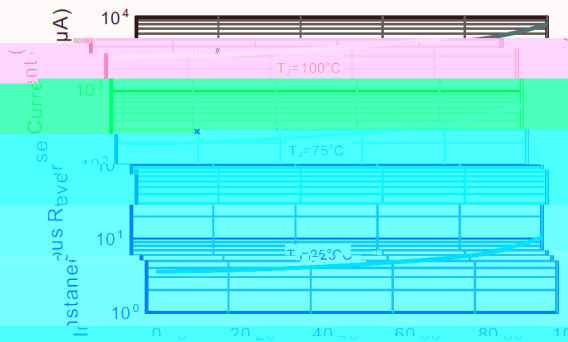


Fig.3 Typical Forward I-V Characteristic

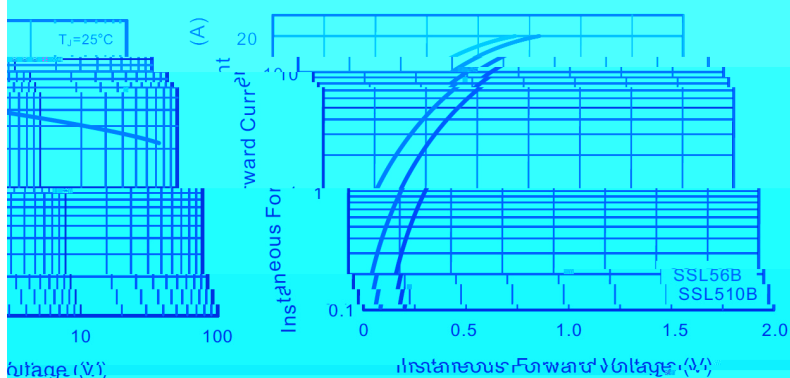


Fig.4 Typical Input Capacitance

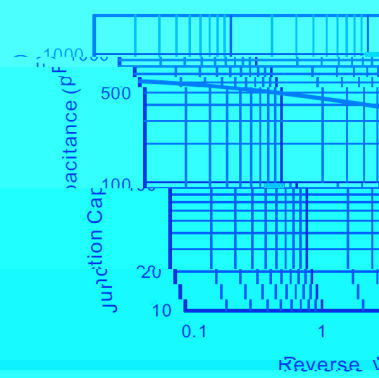


Fig.5 Thermal Impedance

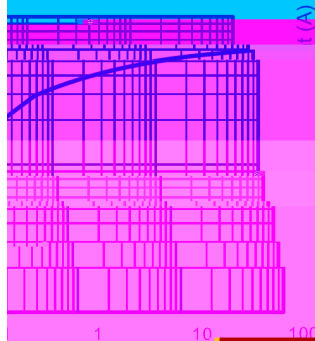


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current

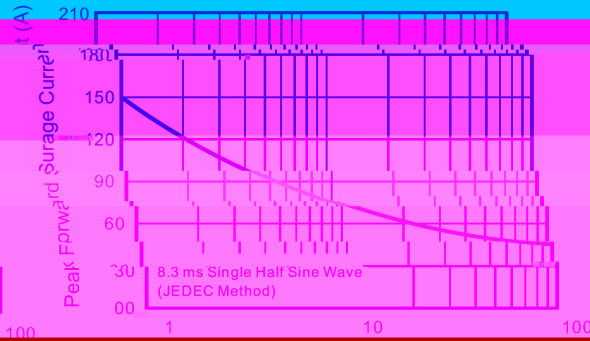
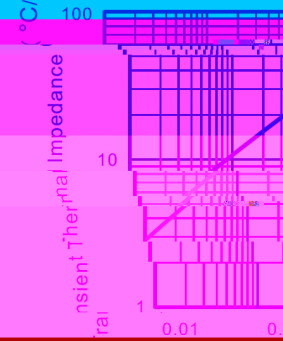
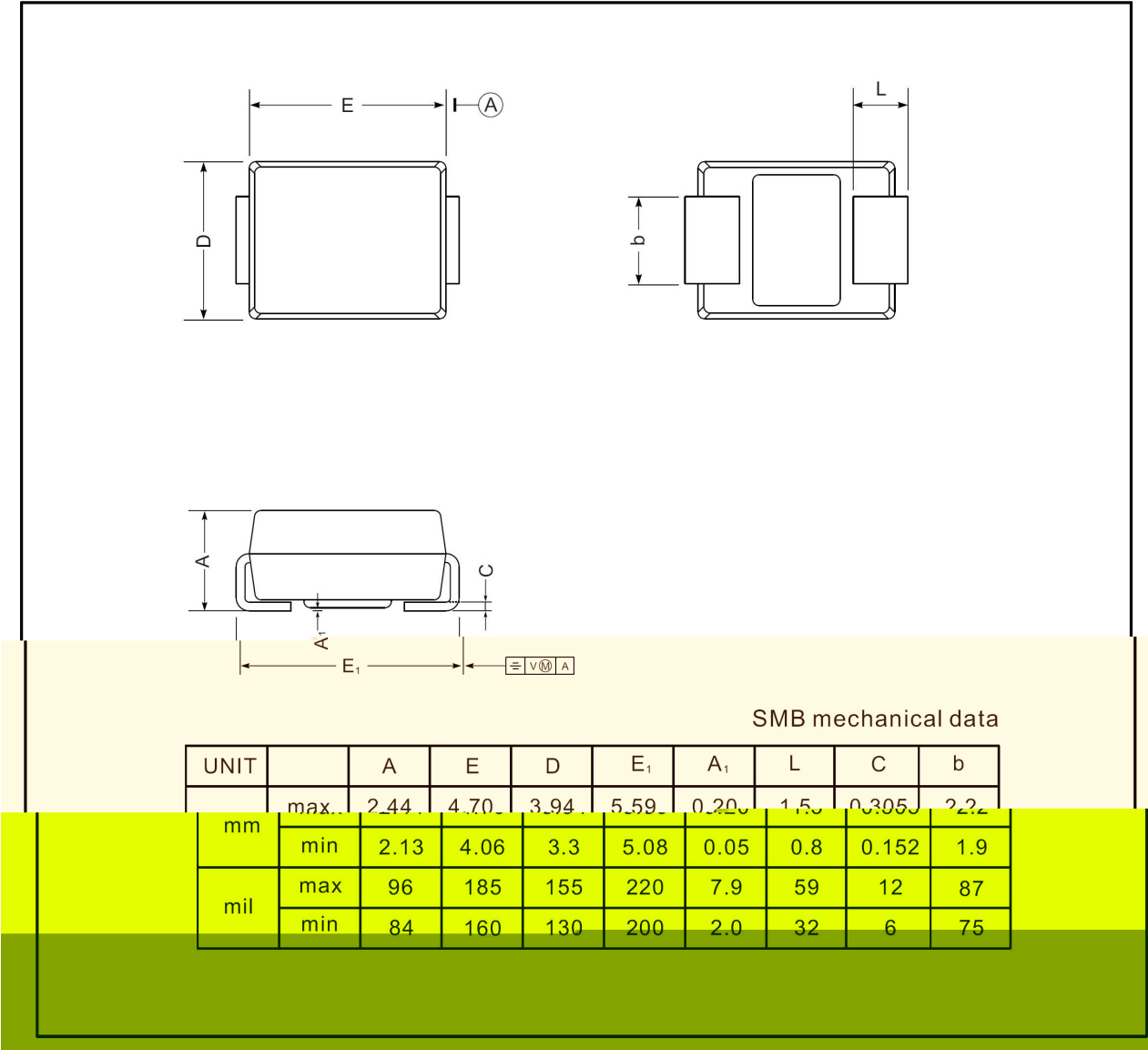


Fig.7 Typical Transient Thermal Impedance



/ Package Dimensions

SMB





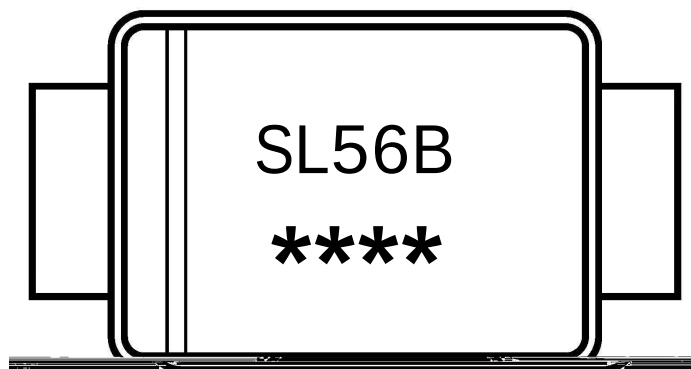
/ Marking Instructions

Marking

Type number	Marking code
SSL56B	SL56B
SSL510B	SL510B



/ Marking Instructions



SL56B

1 *

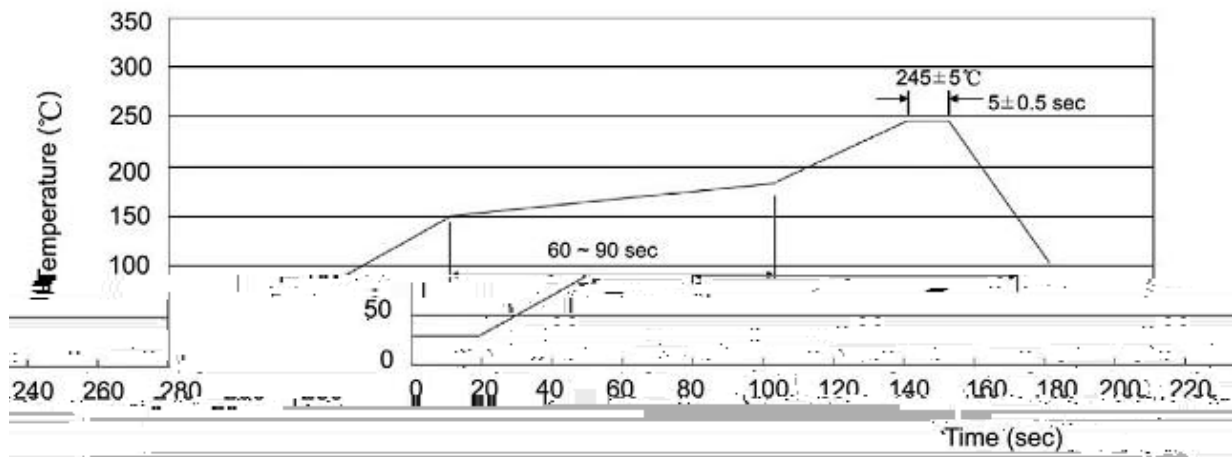
3 *

Note:

SL56B Product Type Code

**** Lot No. Code The 1st * means:YM Code The last 3 * means:little Lot No Code

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量	Dimension 包装尺寸 (unit: mm ³)
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