

SSL310

Rev.A Aug.-2023

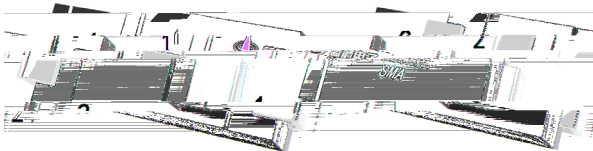
100V

3.0A SMA

Surface Mount Schottky Barrier Rectifier, Reverse Voltage:100V, Forward Current:3.0A,SMA package.

Low power loss, high efficiency, High forward surge current capability, For use in low voltage, high frequency inverters, and polarity protection applications,For surface mounted applications,HF product.

General purpose.



/ Marking

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/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	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 $T_c=100^\circ\text{C}$	$I_{F\text{ AV}}$	3.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	100	A
Typical Junction Capacitance ¹⁾	C_i	280	pF
Typical Thermal Resistance ²⁾	R_{JA}	60	/W
Operating Junction Temperature Range	T_j	-55~150	
Storage Temperature Range	T_{stg}	-55~150	

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($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Rating	Unit
Max Instantaneous Forward Voltage	V_F	$I_F=3.0\text{A}$	0.6	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	$T_a=25$	0.1	mA

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

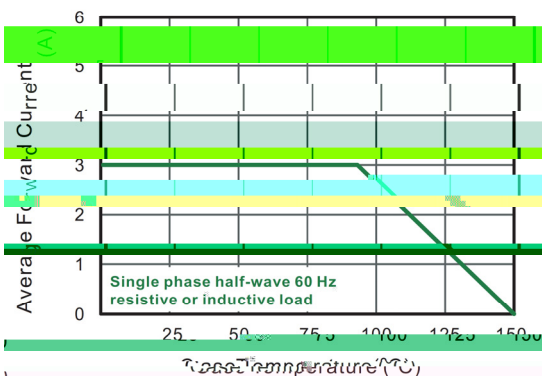


Fig.2 Typical Reverse Characteristics

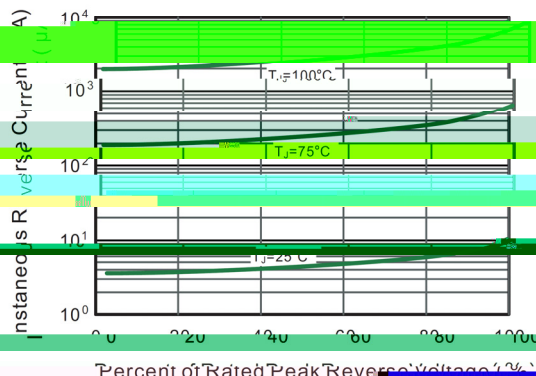


Fig.3 Typical Forward Characteristic

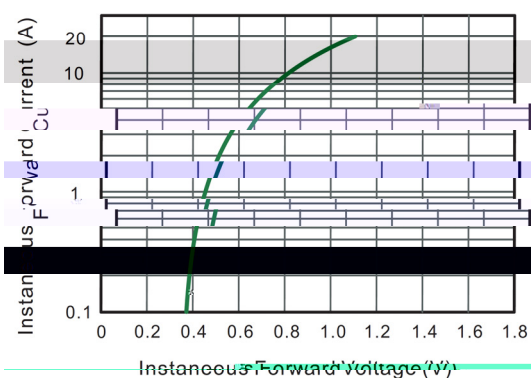


Fig.4 Typical Junction Capacitance

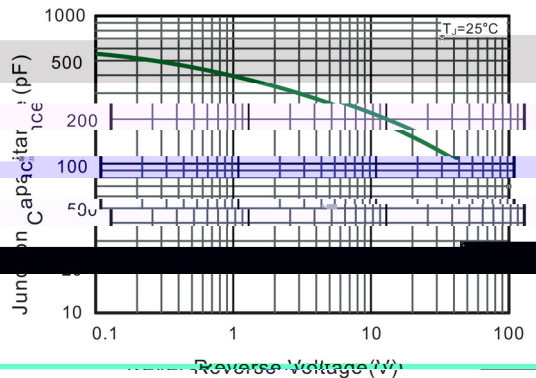


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

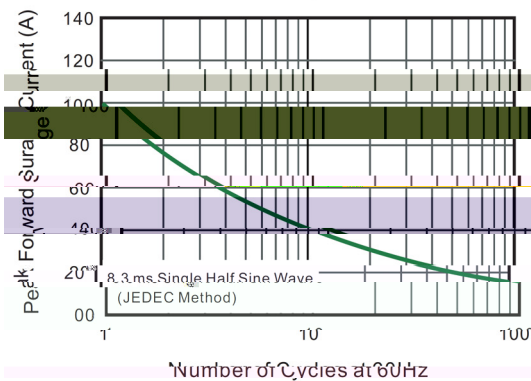
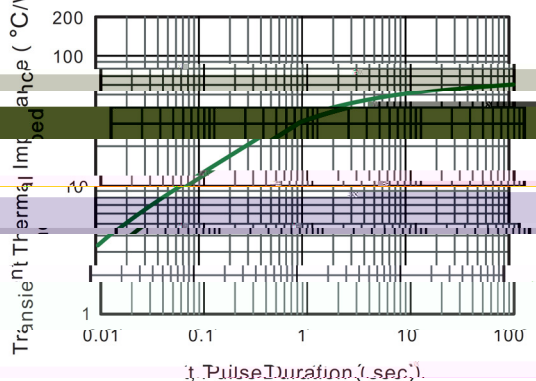
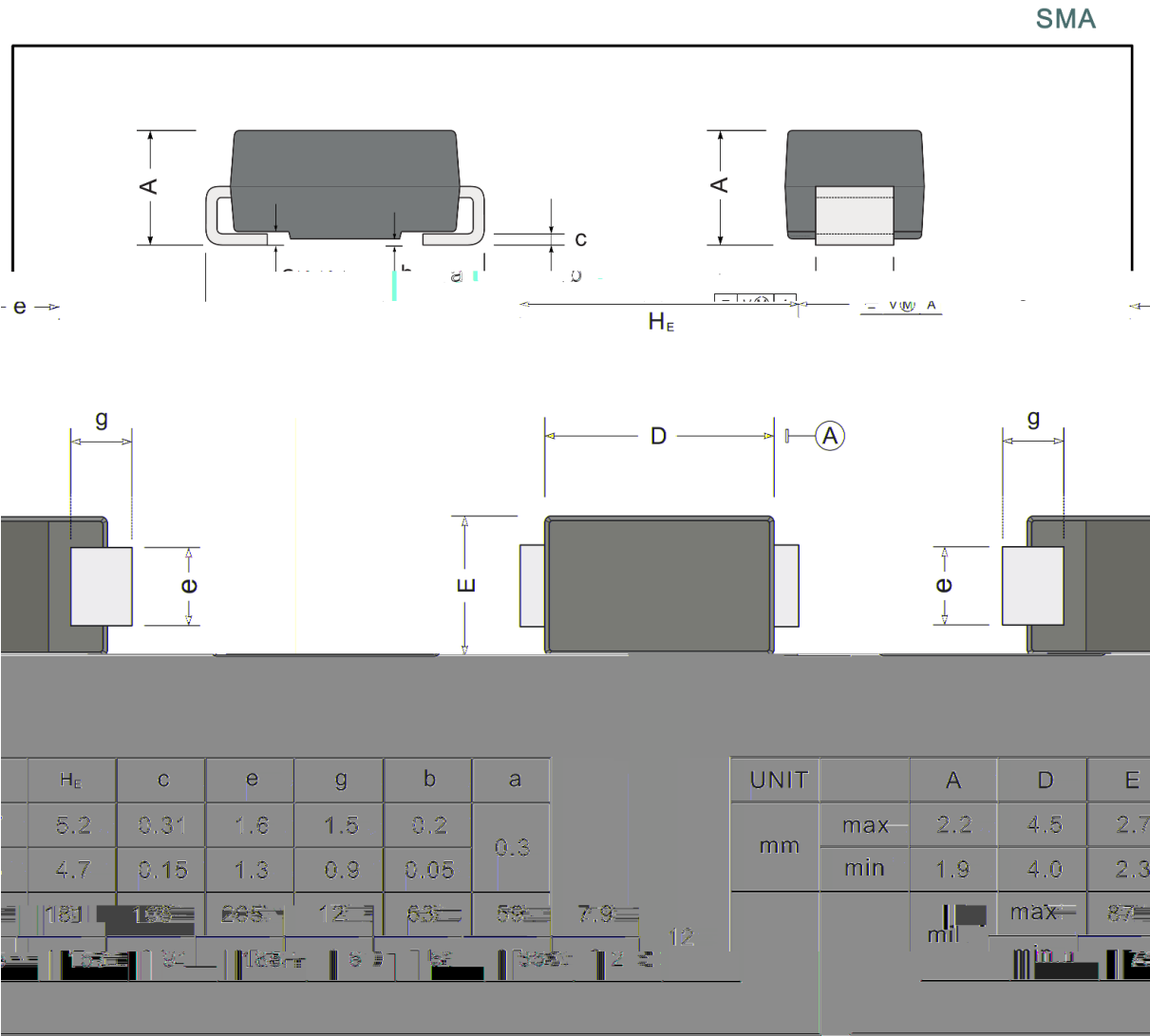


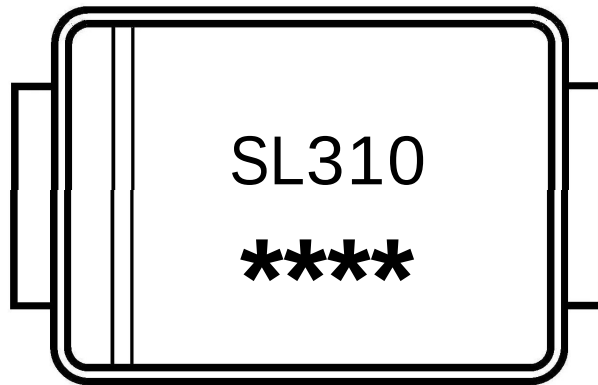
Fig.6 Typical Transient Thermal Impedance



/ Package Dimensions



/ Marking Instructions



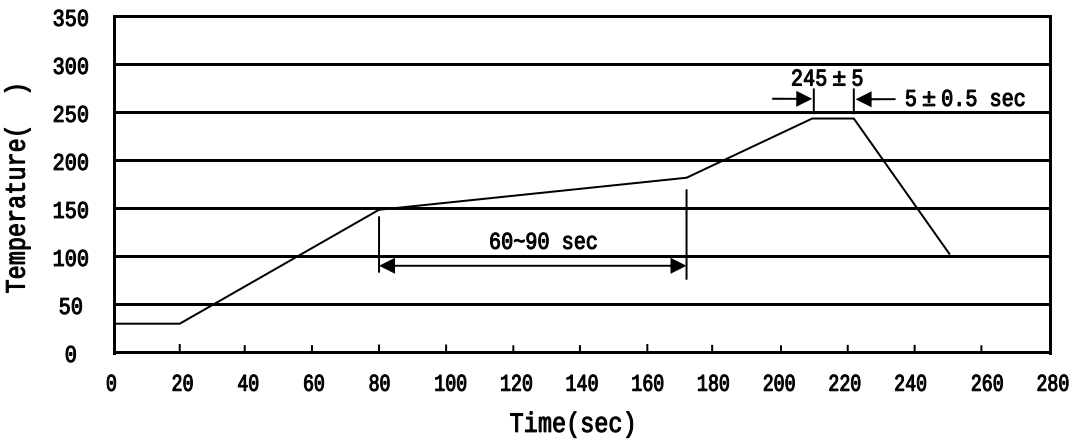
SL310

Note:

SL310 Product Type Code

***** Lot No. Code, code change with Lot No

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



Note:

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

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
SMA	5,000	2	10,000	7	70,000	13 ×12	336×336×40	380×335×366

/ Notices