

/ Descriptions

100V 5.0A SMA

Surface Mount Schottky Barrier Rectifier, Reverse Voltage:100V, Forward Current:5.0A,SMA package.

/ Features

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.

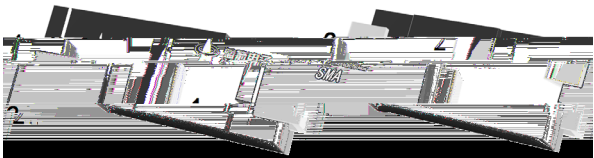
/ Applications

General purpose.

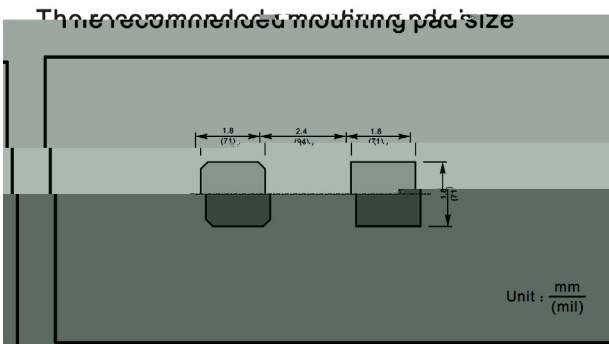
/ Equivalent Circuit



/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
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 Tc=100	$I_{F\ AV}$	5	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	150	A
Typical Junction Capacitance ¹⁾	C_i	300	pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	50	/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(Ta=25)

Parameter	Symbol	Test Conditions	Rating	Unit
Max Instantaneous Forward Voltage	V_F	$I_F=5.0A$	0.6	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	$T_a=25$	1.0	mA
		$T_a=100$	50	

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

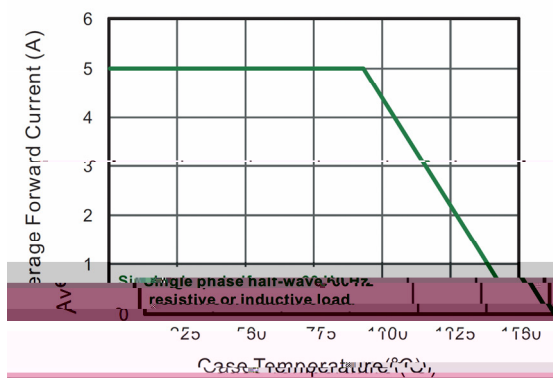


Fig.2 Typical Reverse Characteristics

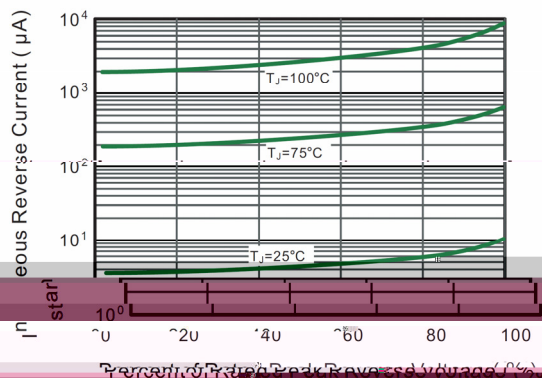


Fig.3 Typical Forward Characteristic

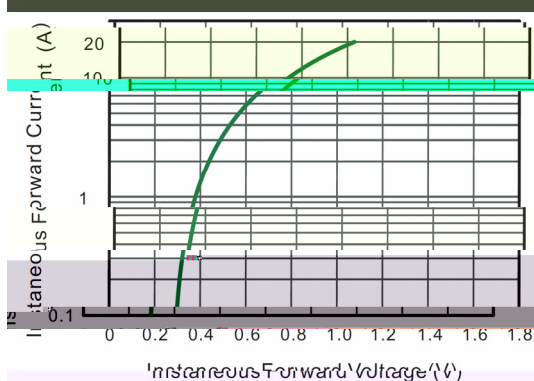


Fig.4 Typical Junction Capacitance

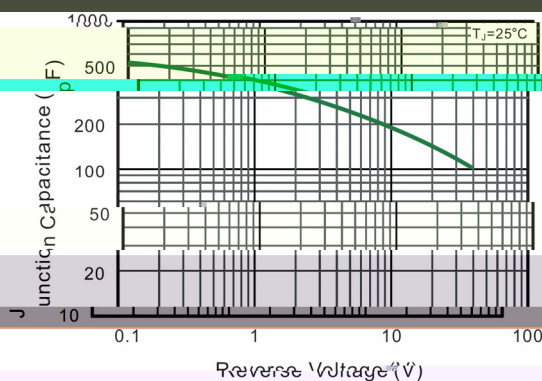


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

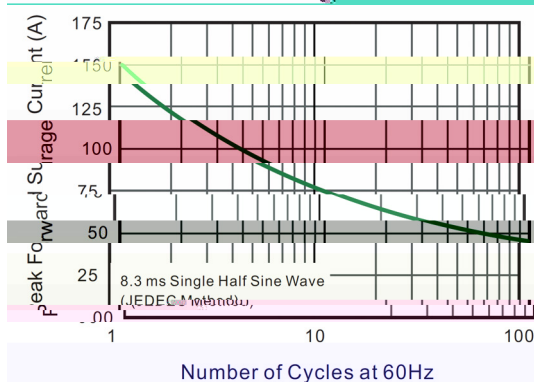
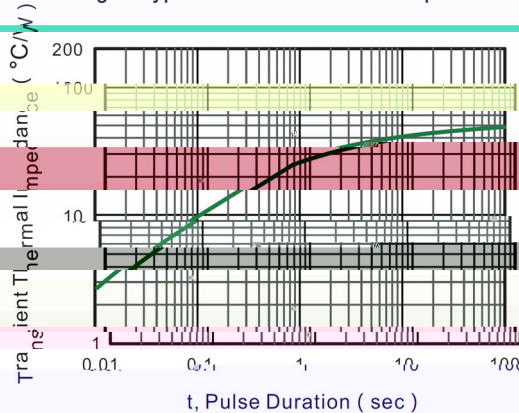
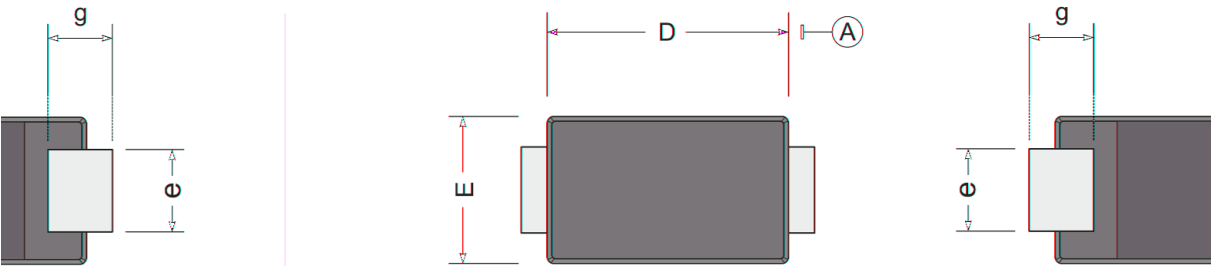
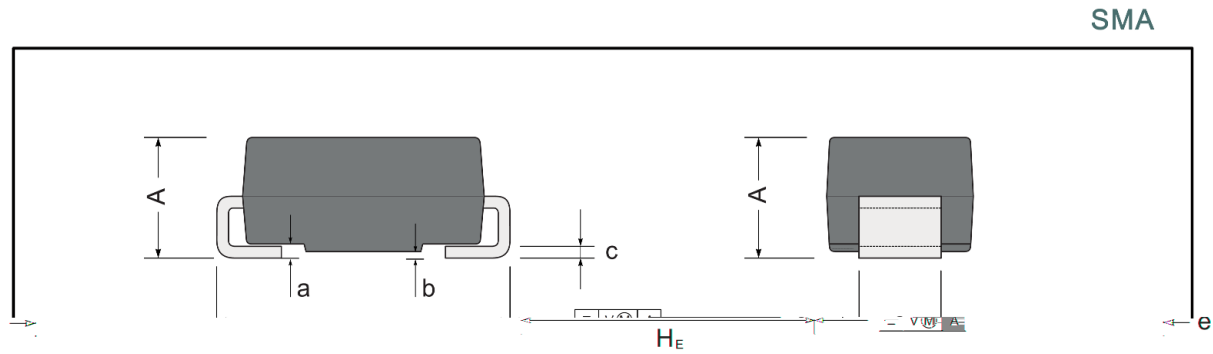


Fig.6 Typical Transient Thermal Impedance



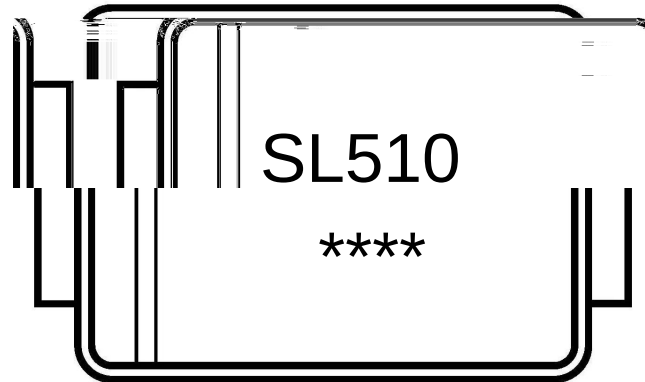
/ Package Dimensions



	b	a
	0.2	0.3
	0.05	
9	7.9	12
5	2	

UNIT		A	D	E	H _E	c	e	g
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9
mil	max	87	181	108	205	12	63	5
	min	75	157	91	185	6	51	3

/ Marking Instructions



SL510

Note:

SL510 Product Type Code

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

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

/ Notices