

/ Descriptions

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.

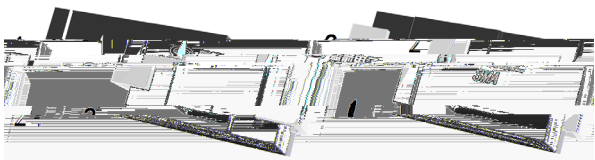
/ Applications

General purpose.

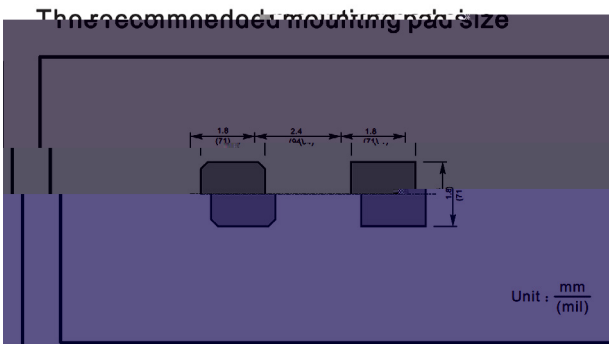
/ Equivalent Circuit



/ 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_{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

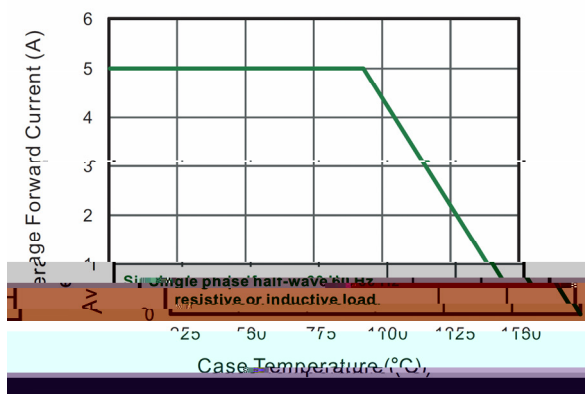


Fig.2 Typical Reverse Characteristics

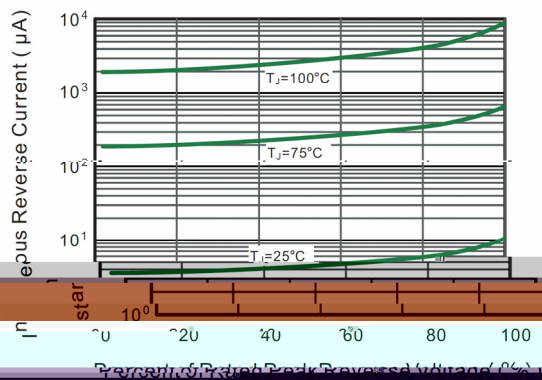


Fig.3 Typical Forward Characteristic

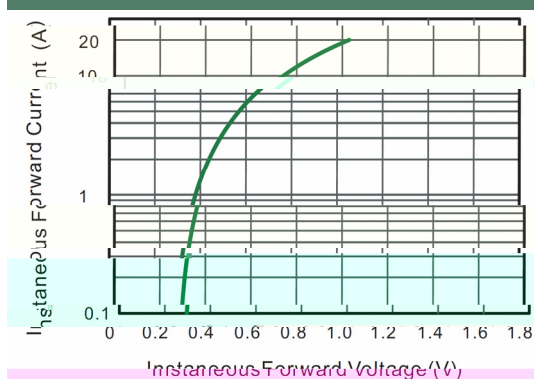


Fig.4 Typical Junction Capacitance

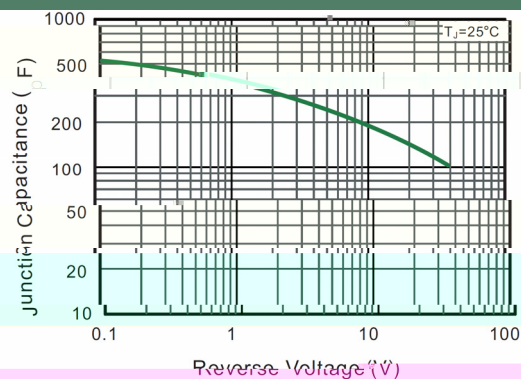


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

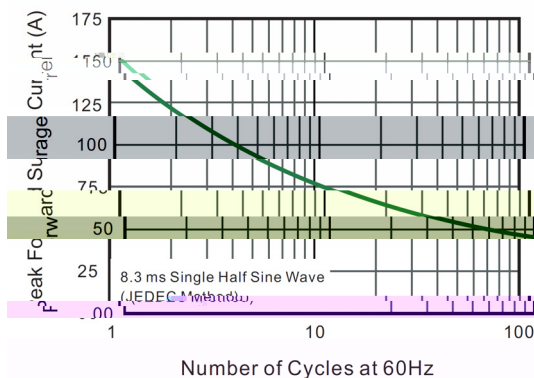
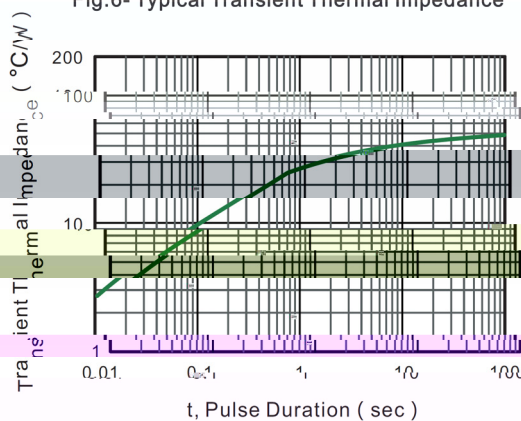
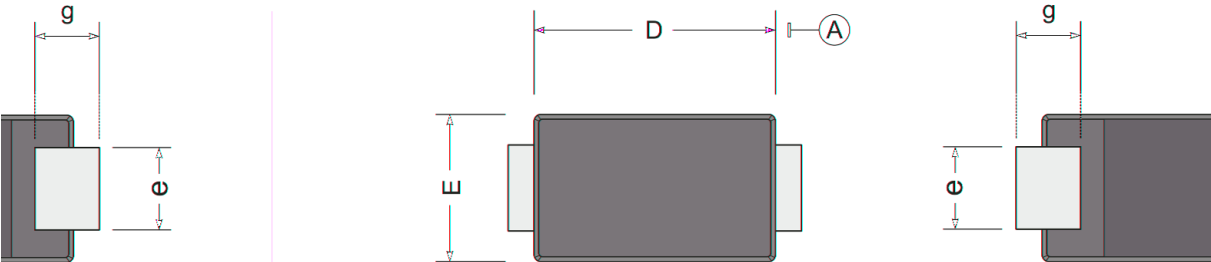
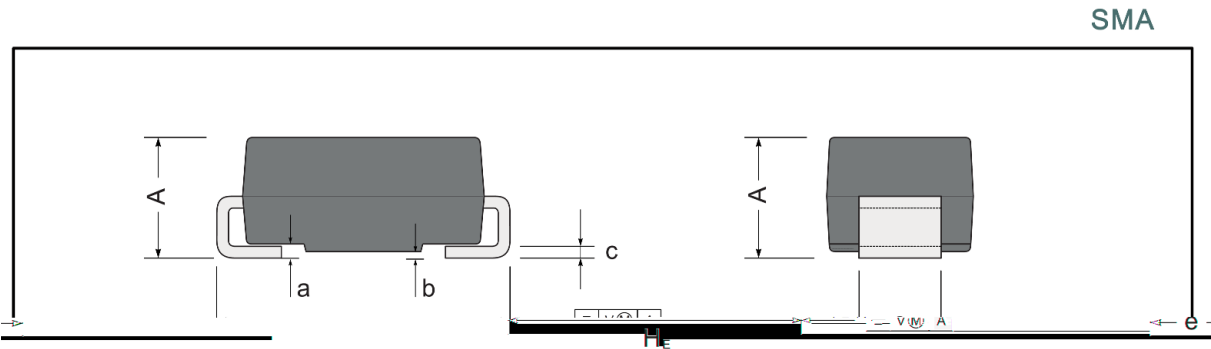


Fig.6 Typical Transient Thermal Impedance

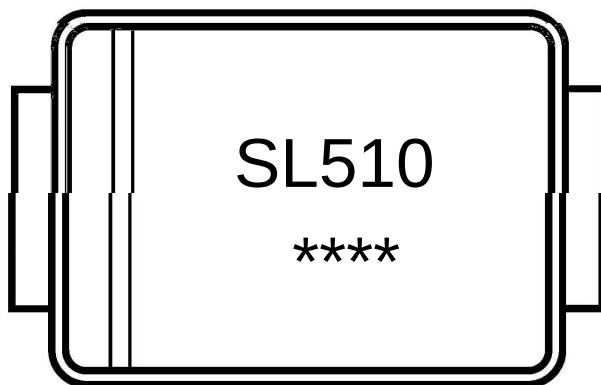


/ Package Dimensions



b	a			UNIT		A	D	E	H _E	c	e	g
0.2	0.3			mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5
0.05					min	1.9	4.0	2.3	4.7	0.15	1.3	0.9
12.7	63.5	50.8	7.9	12.7				max	87.5	181.1	158.8	205.1
6.35	51.0	35.0	2.0			mil		min	75.0	157.8	91.3	185.4

/ Marking Instructions

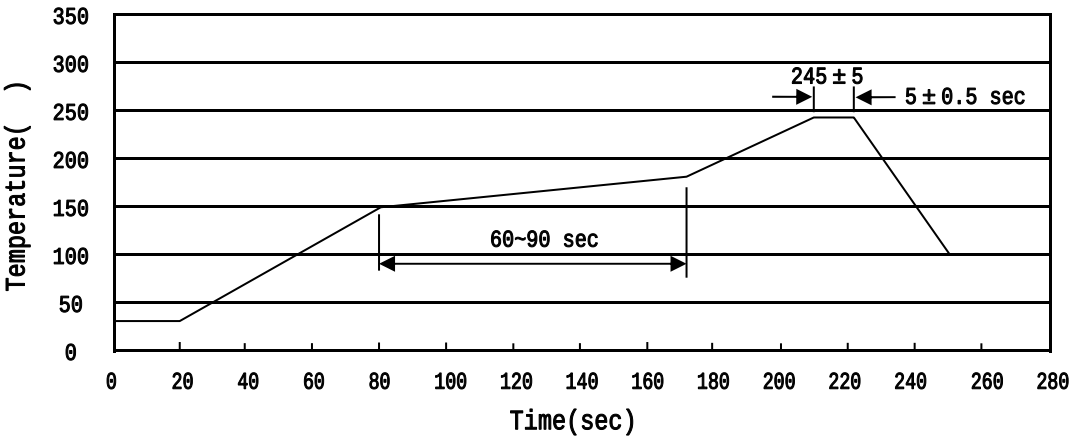


Note:

Product Type Code

Lot No. Code, code change with Lot No

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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)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SMA	5,000	2	10,000	7	70,000	13 ×12	336×336×40	380×335×366

/ Notices