

/ Descriptions

40V 5.0A SMA
Surface Mount Schottky Barrier Rectifier, Reverse Voltage:40V, 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.

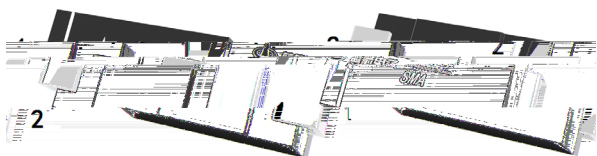
/ Applications

General purpose.

/ Equivalent Circuit



/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode



/ Marking

See Marking Instructions.

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

Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current at $T_c=100^\circ\text{C}$	$I_{F\text{ }AV}$	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	800	pF
Typical Thermal Resistance ²⁾	R_{JA}	45	/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	$I_F=5.0A$	0.45	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

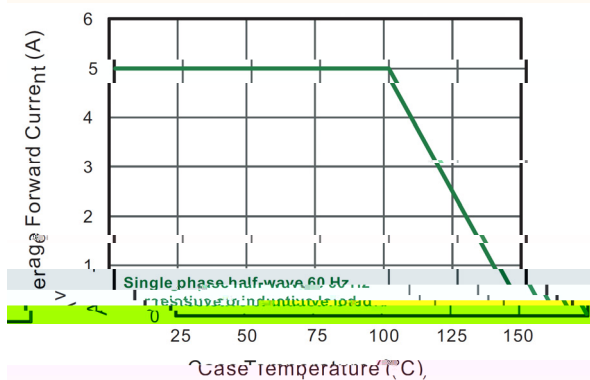


Fig.2 Typical Reverse Current Characteristics

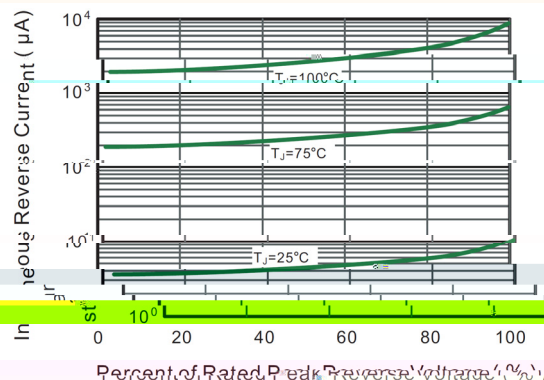


Fig.3 Typical Forward Characteristics

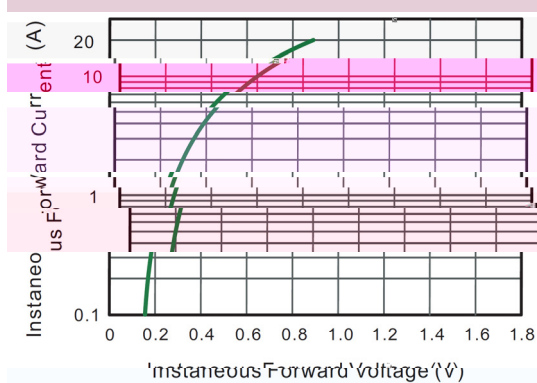


Fig.4 Typical Junction Capacitance

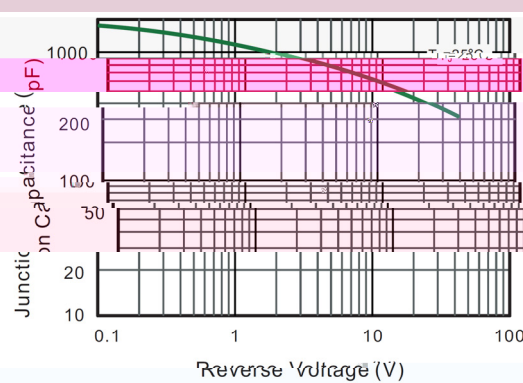


Fig.5 Maximum Non-Resistive Peak Forward Surge Current

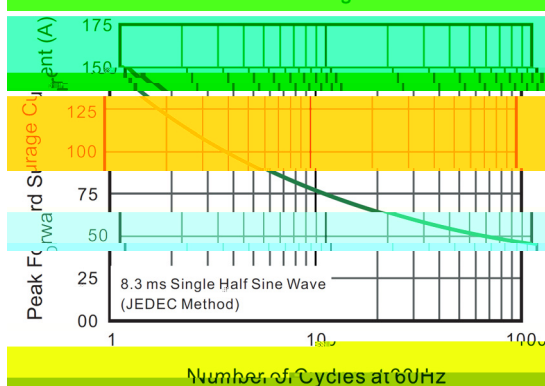
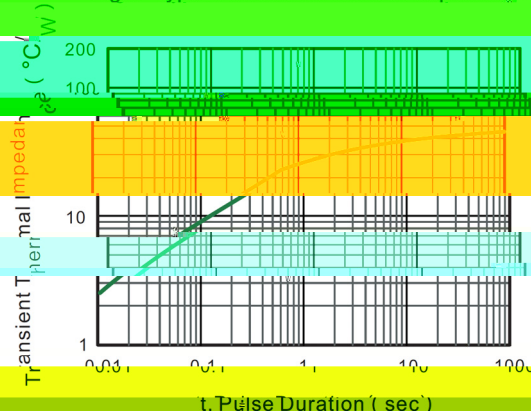
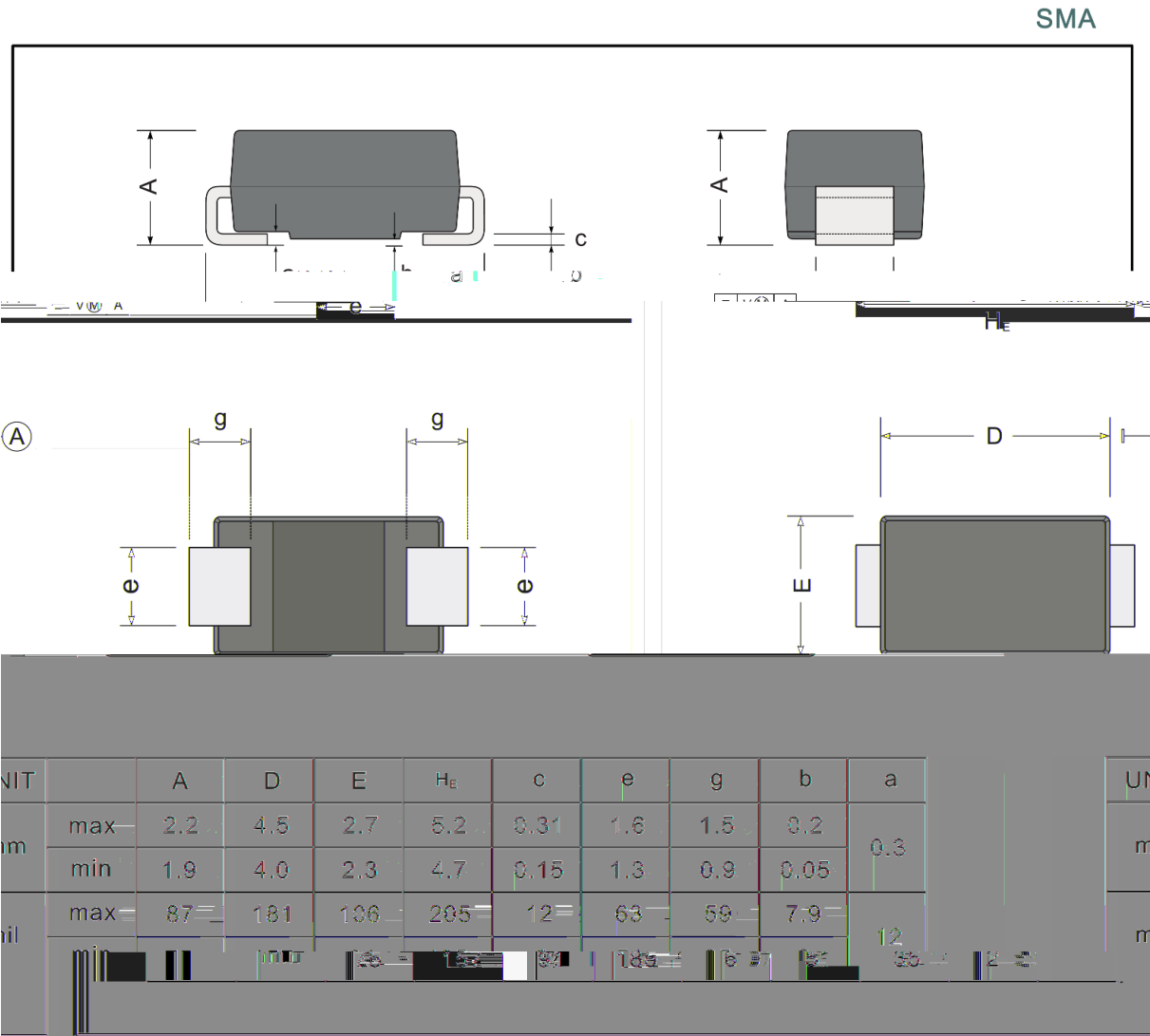


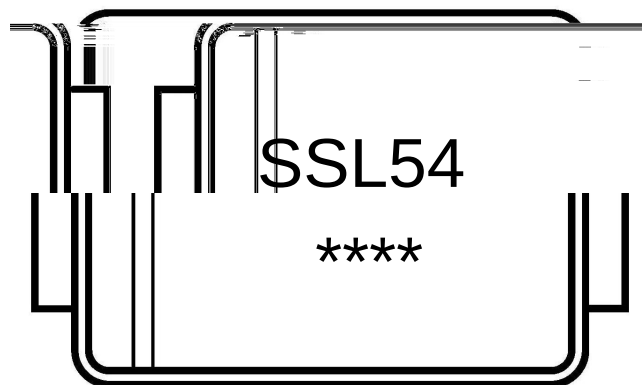
Fig.6 Typical Transient Thermal Impedance



/ Package Dimensions



/ Marking Instructions



SSL54

Note:

SSL54 Product Type Code

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

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

- Note:
1. Preheating:150~180 , Time:60~90sec.
2. Peak Temp.:245±5 , Duration:5±0.5sec.
3. Cooling Speed: 2~10 /sec.
- 1 150 180 60 90sec;
2 245±5 5±0.5sec;
3 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/Reel /	Reels/Inner Box /	Units	Dimension (unit mm ³)
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