/ Descriptions

40V 5.0A SMB

Surface Mount Schottky Barrier Rectifiers, Reverse Voltage 40V,Forward Current: 5.0A ,SMB package.

/ Features

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

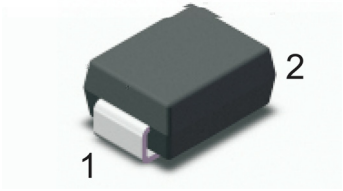
/ Applications

.

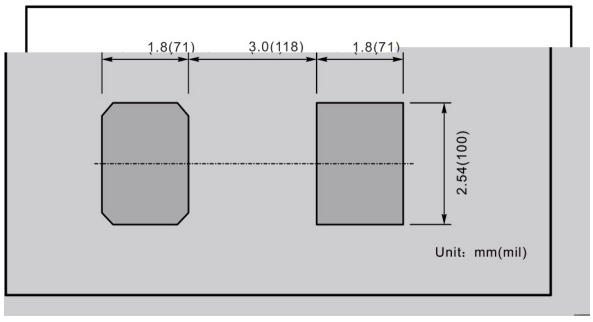
General purpose.

/ Equivalent Circuit

/ Pinning



The recommended mounting pad size



PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

/ Marking

Type number	Marking
SSL54B	SSL54

/ Absolute Maximum Ratings(Ta=25)

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	$I_{F(AV)}$	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_j	800	pF
Typical Thermal Resistance [2]	$R_{\theta JA}$	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(Ta=25)

Parameter	Symbol	Test Conditions	数值 Rating	Unit
Maximum Instantaneous Forward Voltage	V_F	I_F=5.0A	0.45	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	T_a=25℃ T_a=100℃	1 50	mA

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

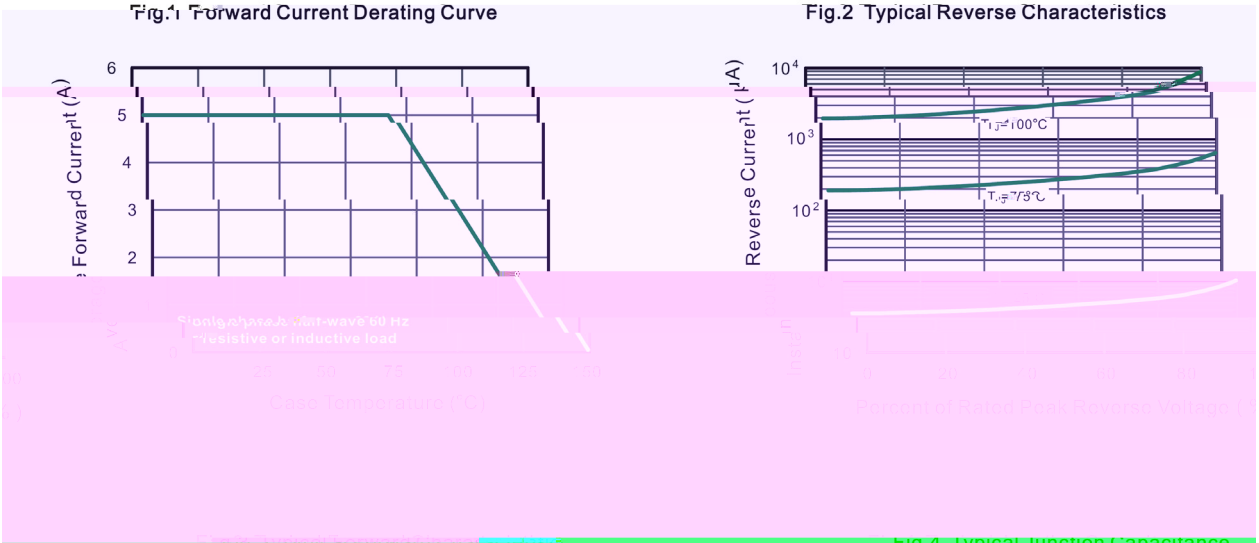


Fig.2 Typical Reverse Characteristics

Fig.3 Typical Forward Characteristics

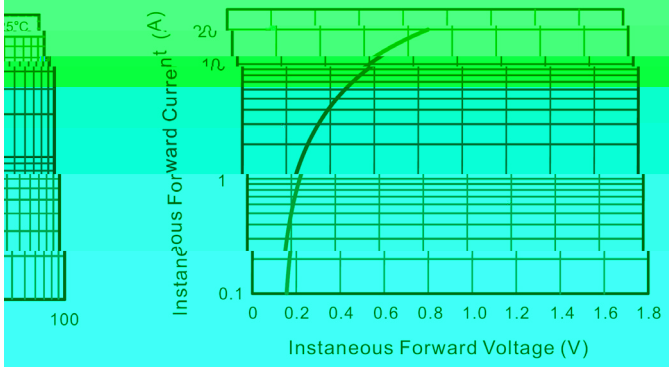


Fig.4 Typical Junction Capacitance

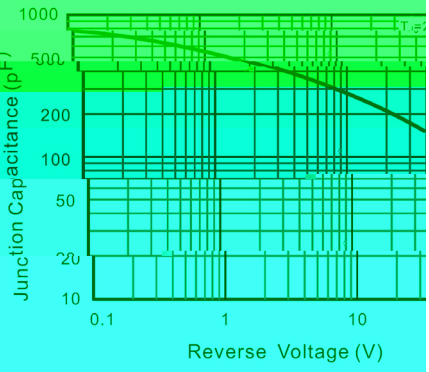


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

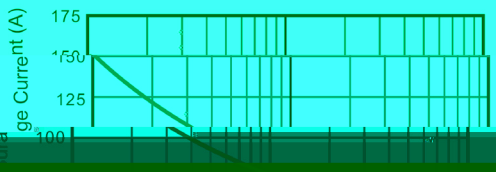
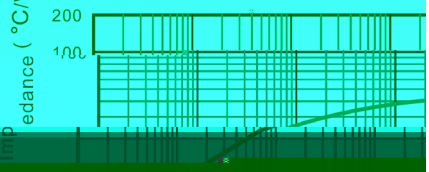
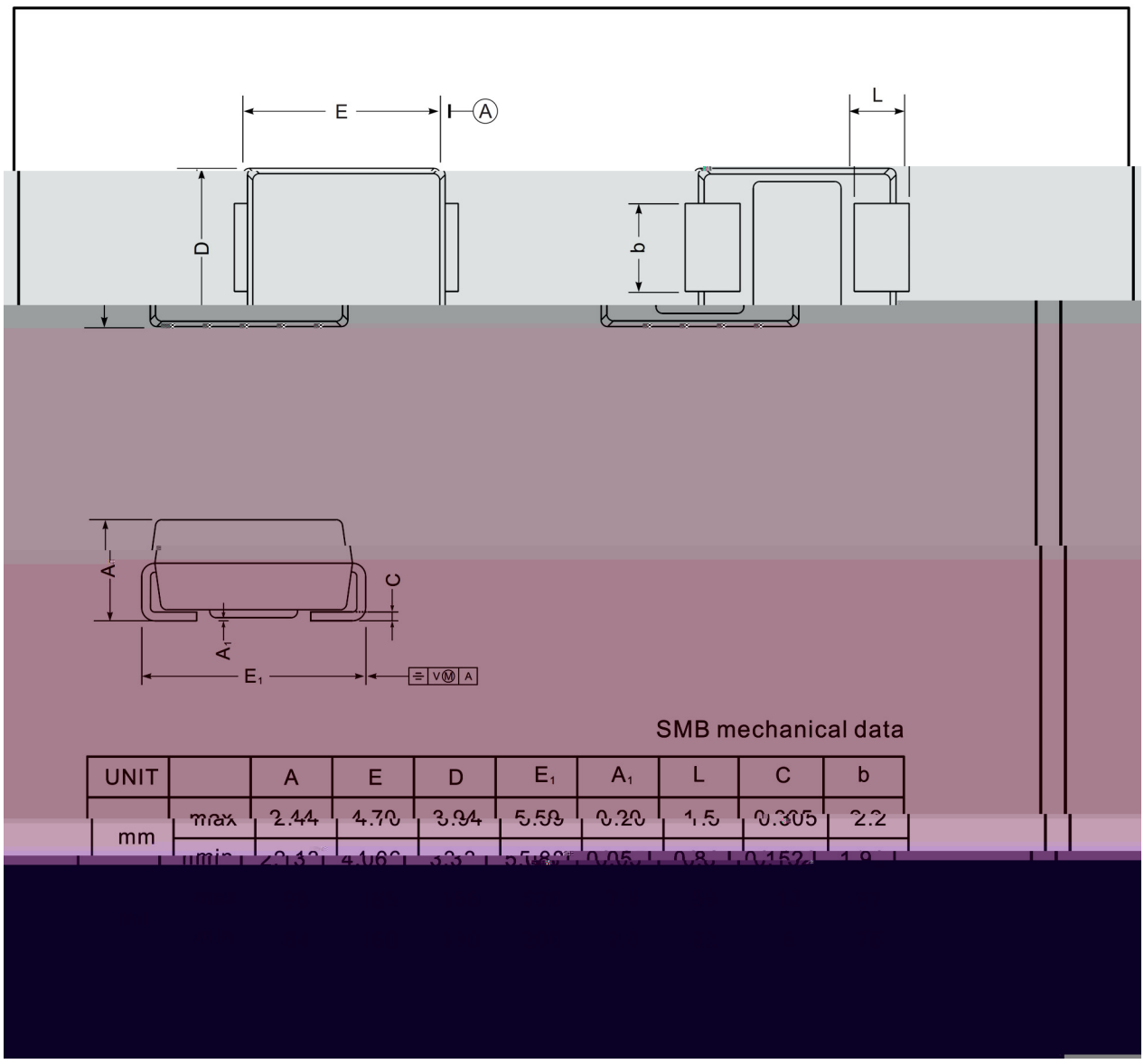


Fig.6- Typical Transient Thermal Impedance



/ Package Dimensions

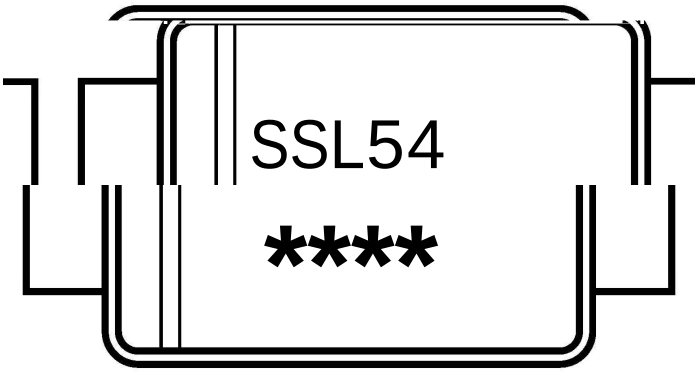
SMB



SMB mechanical data

UNIT		A	E	D	E_1	A_1	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.30	5.08	0.05	0.8	0.152	1.9

/ Marking Instructions



SSL54

******** 1 ***** 3 *****

Note:

SSL54 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)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SMB	3000	5	15000	5	75000	7″ ×11	185X180X105	390X385X205

/ Notices