

SSL54C~SSL510C

Rev.B Feb.-2021

描述 / Descriptions

表面贴装肖特基整流二极管，反向电压：40~100V，正向电流：5.0A， SMC 封装。

Surface Mount Schottky Barrier Rectifier, Reverse Voltage: 40 to 60 V, Forward Current:5.0A ,SMC package.

特征 / Features

低功耗，高效率，正向浪涌电流大，适用于低压高频逆变器和极性保护，表面贴装，无卤产品。

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, Halogen free product.

用途 / Applications

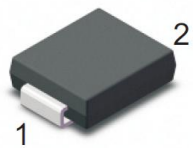
一般用途.

General purpose.

内部等效电路 / Equivalent Circuit

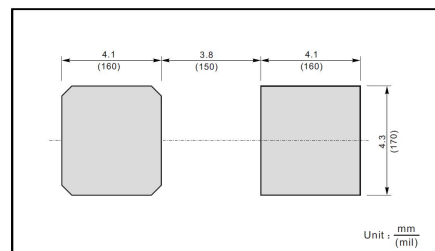


引脚排列 / Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



印章代码 / Marking

见印章说明。 See Marking Instructions.

极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter	符号 Symbol	数值 Rating					单位 Unit
		SSL54C	SSL545C	SSL55C	SSL56C	SSL510C	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	45	50	60	100	V
Maximum RMS voltage	V_{RMS}	28	32	35	42	70	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0					A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150					A
Typical Junction Capacitance ¹⁾	C_i	500	300			pF	
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	60					°C/W
Operating Junction Temperature Range	T_j	-55 ~ +150					°C
Storage Temperature Range	T_{stg}	-55 ~ +150					°C

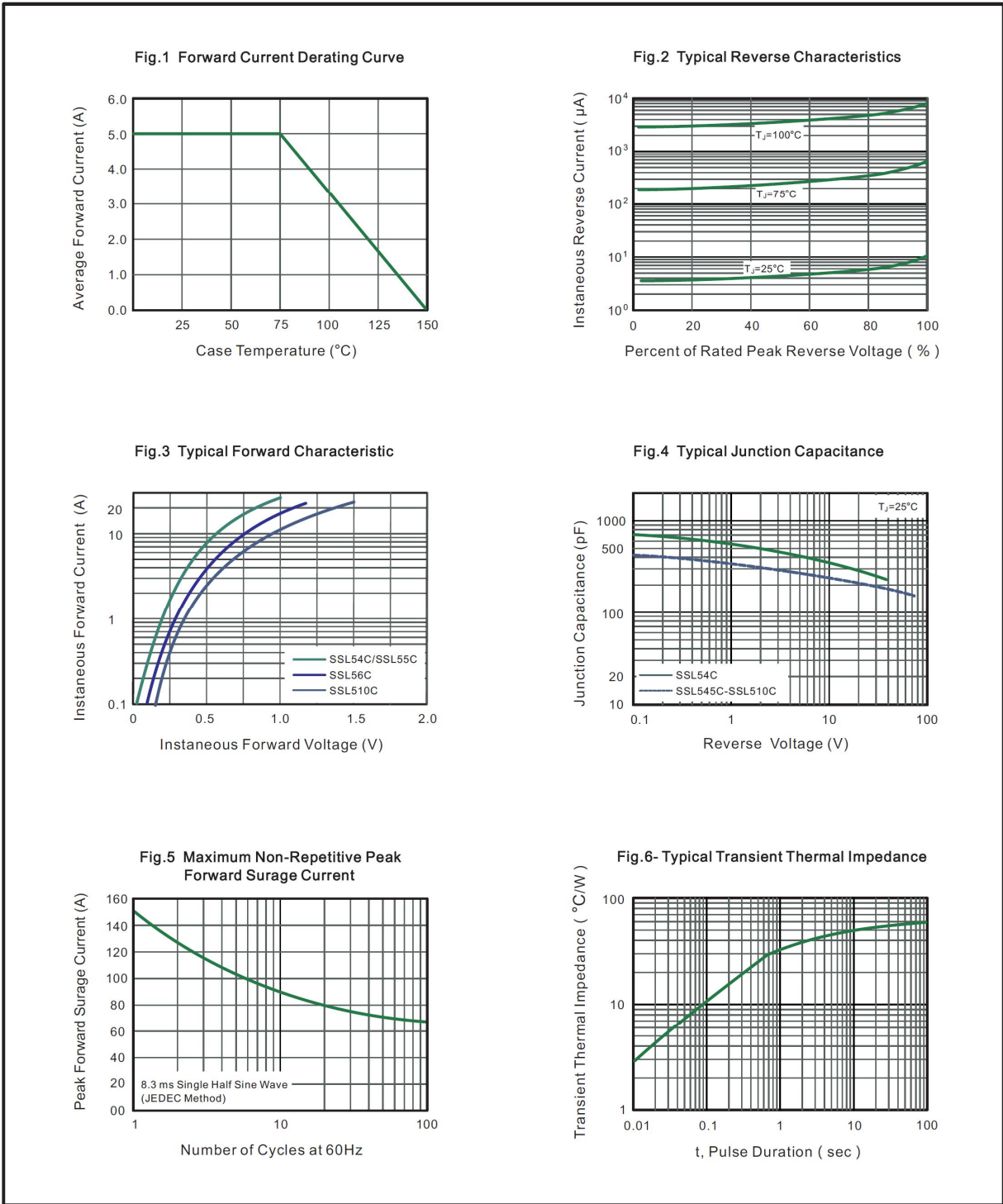
Note:

- 1) Measured at 1MHz 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.

电性能参数 / Electrical Characteristics(Ta=25°C)

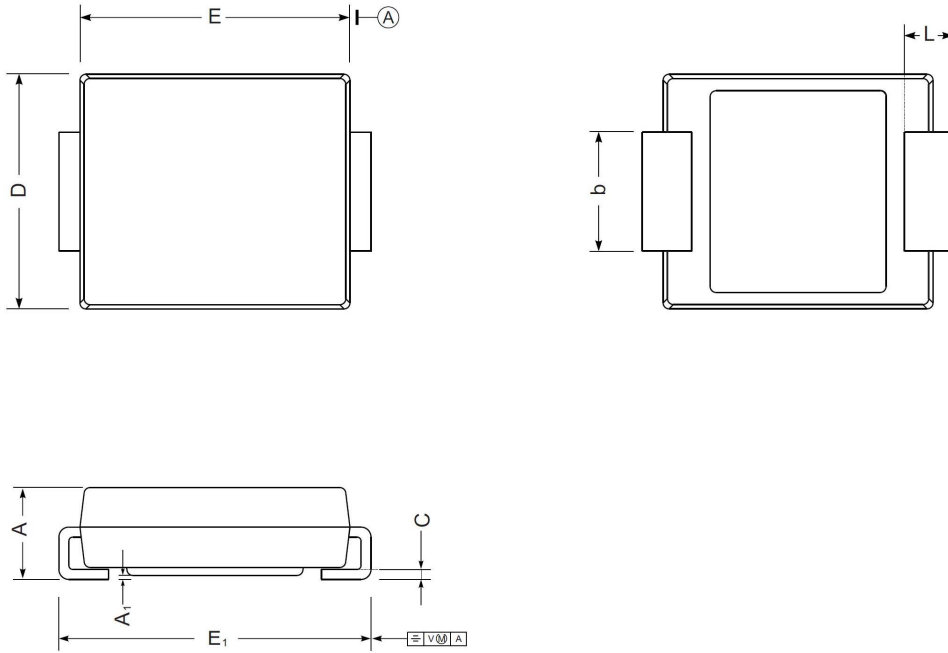
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating					单位 Unit
			SSL54C	SSL545C	SSL55C	SSL56C	SSL510C	
Max Instantaneous Forward Voltage	V_F	$I_F=5.0A$	0.45			0.50	0.60	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	$T_a=25^\circ C$	0.5					mA
		$T_a=100^\circ C$	5.0					

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

SMC



SMC mechanical data

UNIT		A	E	D	E ₁	A ₁	C	L	b
mm	max	2.62	7.0	6.2	8.0	0.21	0.31	1.6	3.25
	min	2.00	6.5	5.6	7.6	0.05	0.15	0.9	2.75
mil	max	103	276	244	315	8.3	12	63	128
	min	79	256	220	299	2.0	5.9	35	108



Marking

Type number	Marking code
SSL54C	SSL54
SSL545C	SSL545
SSL55C	SSL55
SSL56C	SSL56
SSL510C	SSL510

印章说明 / Marking Instructions



说明：

SSL54：为型号代码

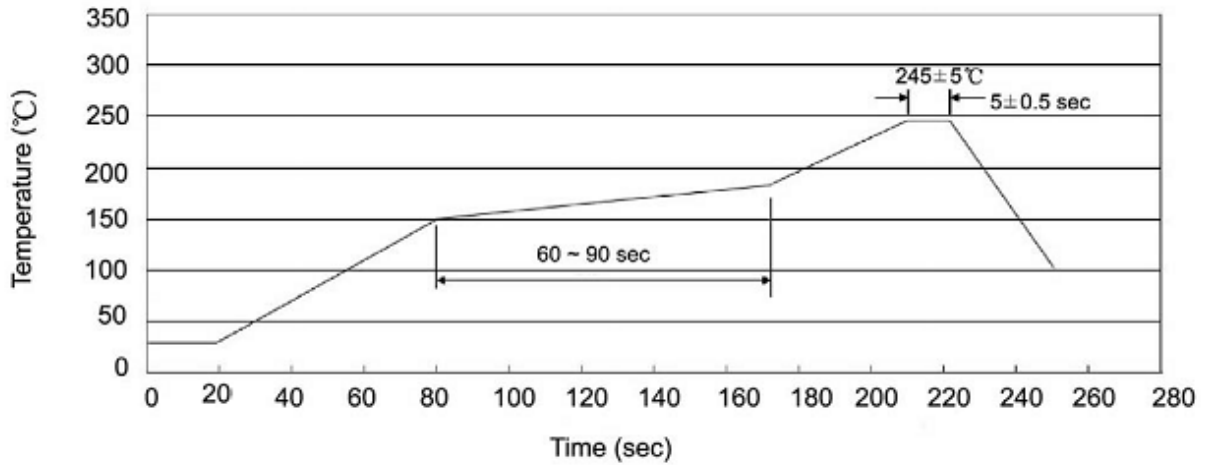
****：为生产批号追溯码，第1个*为年月代码，后面3个*为当月小批号代码

Note:

SSL54：Product Type Code

****：Lot No. Code ,The 1st * means:YM Code ,The last 3 * means:little Lot No Code

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 150 ~ 180°C，时间 60 ~ 90sec；
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec；
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

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

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / 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
SMC	3000	2	6000	6	36000	13" ×16	337X337X49	380X335X366

使用说明 / Notices