

## Descriptions

The SSL54B is Surface Mount Schottky Barrier Rectifiers, SMB plastic package.

## Features

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

## Applications

- General purpose

## Equivalent Circuit



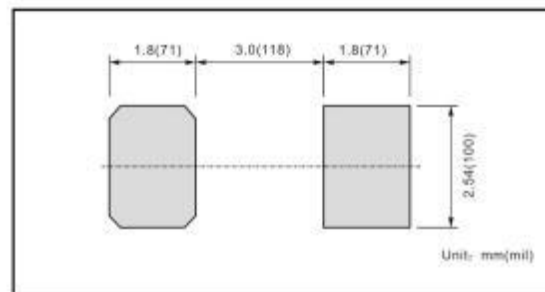
## Pinning



PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



## Marking

Type number	Marking
SSL54B	SSL54

## Absolute Maximum Ratings(Ta=25°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	$I_F (AV)$	5	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	150	A
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	800	pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	45	°C/W
Operating Junction Temperature Range	$T_j$	-55~+150	°C
Storage Temperature Range	$T_{stg}$	-55~+150	°C

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°C)

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

Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

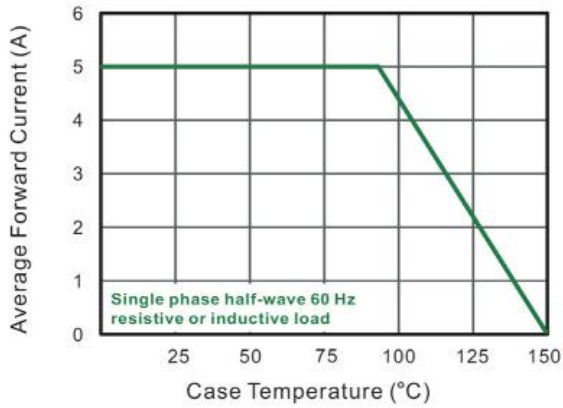


Fig.2 Typical Reverse Characteristics

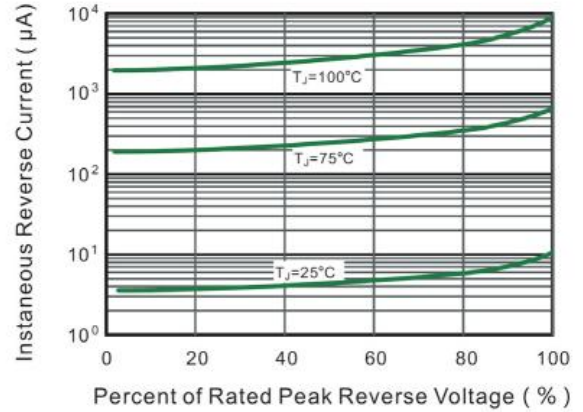


Fig.3 Typical Forward Characteristic

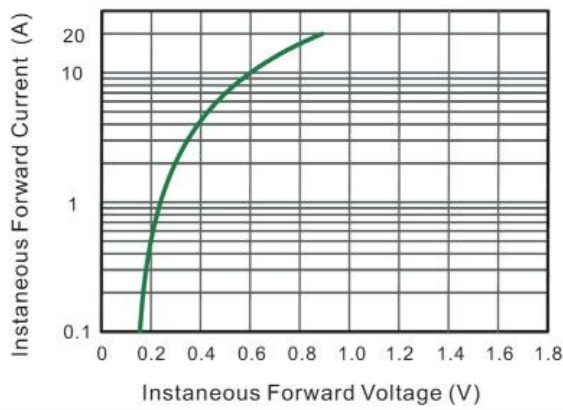


Fig.4 Typical Junction Capacitance

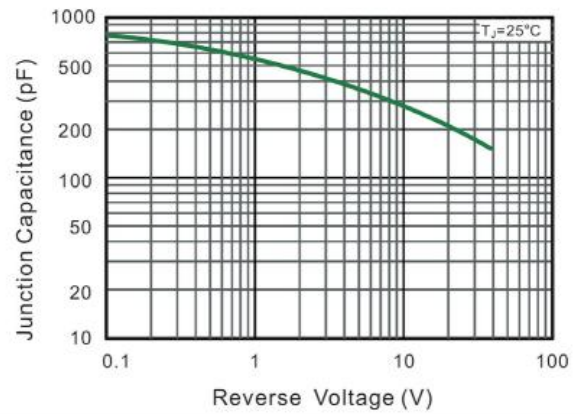


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

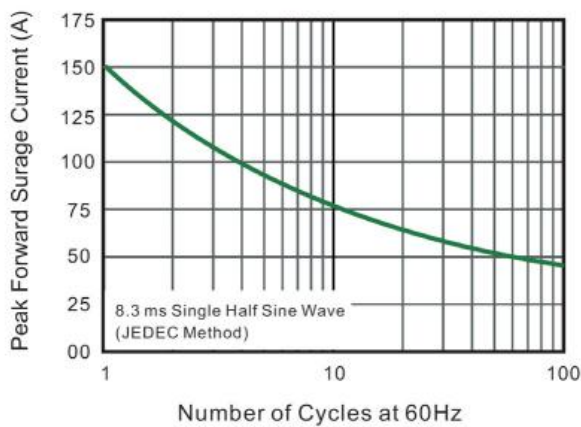
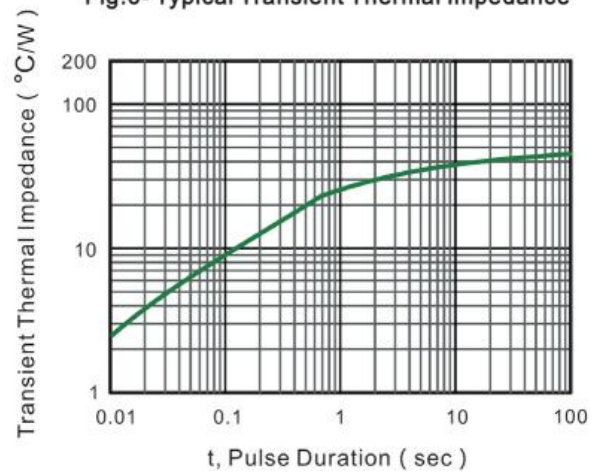


Fig.6- Typical Transient Thermal Impedance



## Marking Instructions



Note:

SSL54 : Product Type Code

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

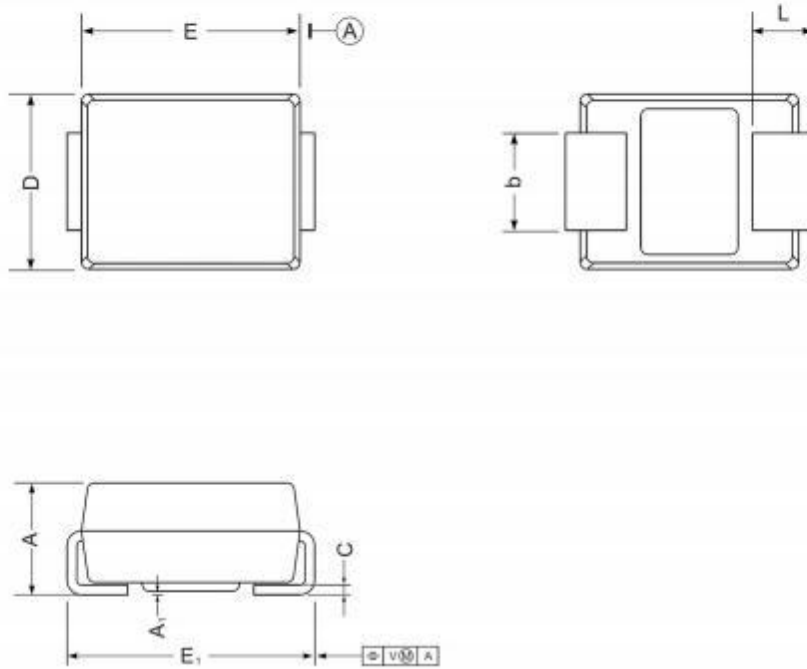
## Packaging SPEC

REEL

Package Type	Units					Dimension (unit: mm <sup>3</sup> )		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SMB	3000	5	15000	5	75000	7" ×11	185X180X105	390X385X205

Package Outline Dimensions

SMB



SMB mechanical data

UNIT		A	E	D	E <sub>1</sub>	A <sub>1</sub>	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	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75