

Description

The SSL56B~SSL510B is surface mount schottky barrier diode rectifiers, reverse Voltage: 60 to 100V ,forward Current: 5.0A,SMB package.

Features

- Low power loss
- High efficiency
- High forward surge current capability
- For surface mounted applications
- Halogen-free product

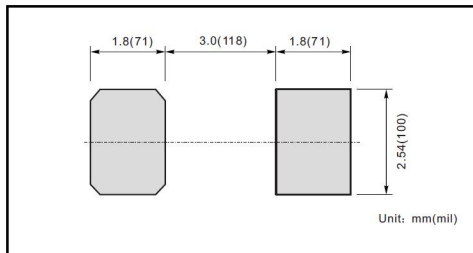
Applications

- General purpose.

Equivalent Circuit & Pinning



The recommended mounting pad size



PIN	DESCRIPTION
1	Cathode
2	Anode

Marking

- See Marking Instructions.

Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Rating		Unit
		SSL56B	SSL510B	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	100	V
Maximum RMS voltage	V_{RMS}	42	70	V
Maximum DC Blocking Voltage	V_{DC}	60	100	V
Maximum Average Forward Rectified Current	$I_F (AV)$	5.0		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150		A
Typical Junction Capacitance ⁽¹⁾	C_j	600		pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	45		℃/W
Operating and Storage Temperature Range	T_j, 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
			SSL56B	SSL510B	
Maximum Instantaneous Forward Voltage	V_F	$I_F=5.0A$	0.5	0.6	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	$T_a=25℃$	1.0		mA
		$T_a=100℃$	50		mA

Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

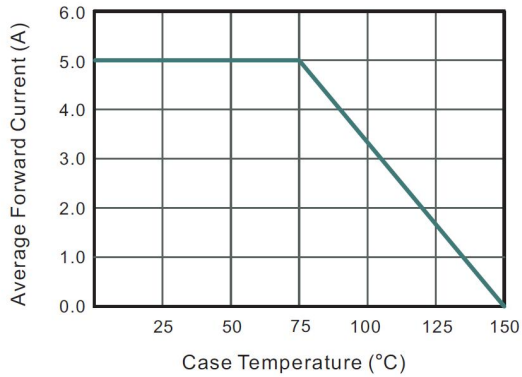


Fig.2 Typical Reverse Characteristics

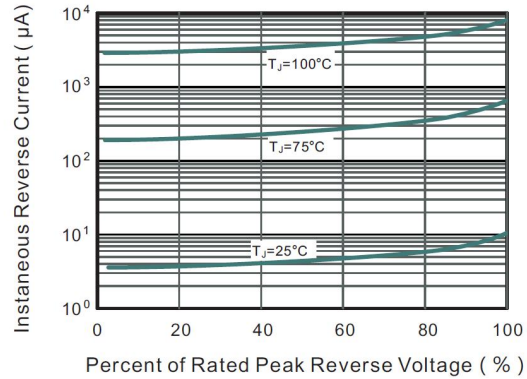


Fig.3 Typical Forward Characteristic

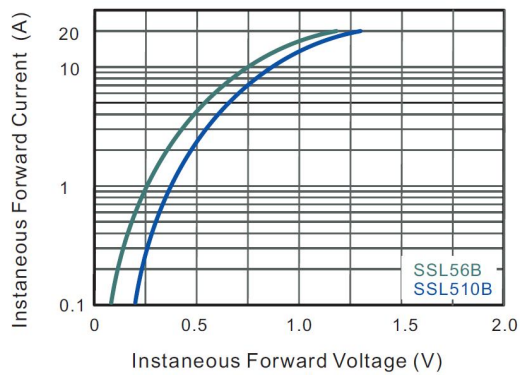


Fig.4 Typical Junction Capacitance

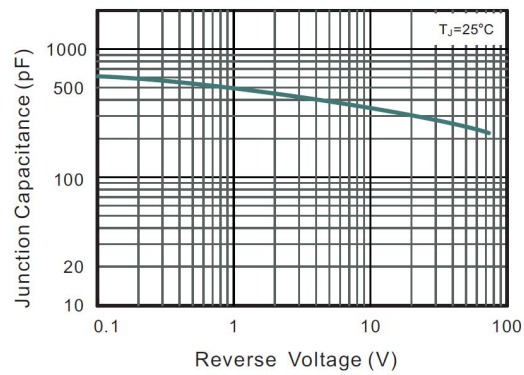


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

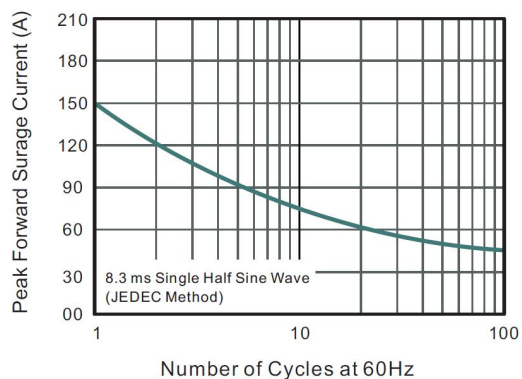
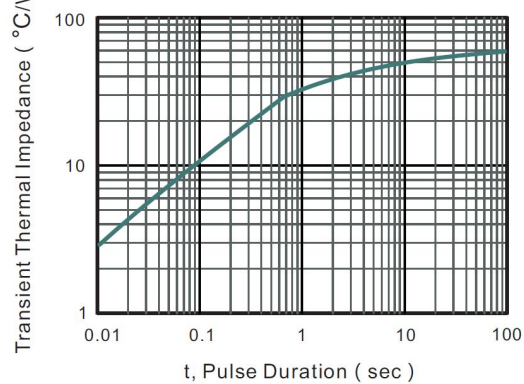


Fig.6 Typical Transient Thermal Impedance



Marking instructions



Note:

SL56B : Product Type Code

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

Marking

Type number	Marking code
SSL56B	SL56B
SSL510B	SL510B

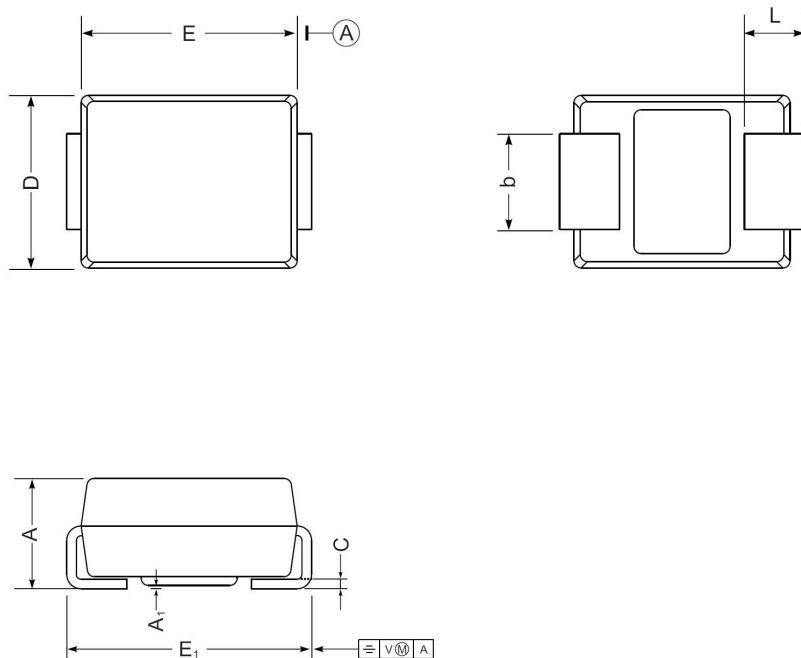
Packaging SPEC.

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
SMB	3000	5	15000	5	75000	7" ×11	185X180X105	390X385X205

Package Outline 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	3.3	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