

# SSL545B

## Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 45 V

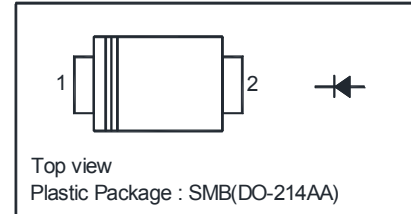
Forward Current - 5 A

### Features

- High forward surge current capability

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



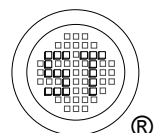
### Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	Value	Unit
	Marking	545	-
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	45	V
Maximum RMS voltage	$V_{RMS}$	32	V
Maximum DC blocking voltage	$V_{DC}$	45	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5	A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	150	A
Maximum Instantaneous Forward Voltage at 5 A	$V_F$	0.43	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ }^{\circ}\text{C}$ $T_a = 100\text{ }^{\circ}\text{C}$	$I_R$	1	mA
		20	
Typical junction capacitance <sup>1)</sup>	$C_J$	800	pF
Typical Thermal Resistance from junction to ambient <sup>2)</sup>	$R_{\theta JA}$	37	$^{\circ}\text{C/W}$
Junction Temperature Range	$T_j$	- 55 to + 125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^{\circ}\text{C}$

<sup>1)</sup> Measured at 1MHz and applied reverse voltage of 4.0V D.C.

<sup>2)</sup> P.C.B. mounted with 2" x 2" (5 x 5cm) copper pad areas.



Electrical characteristic curves

Fig.1 Forward Current Derating Curve

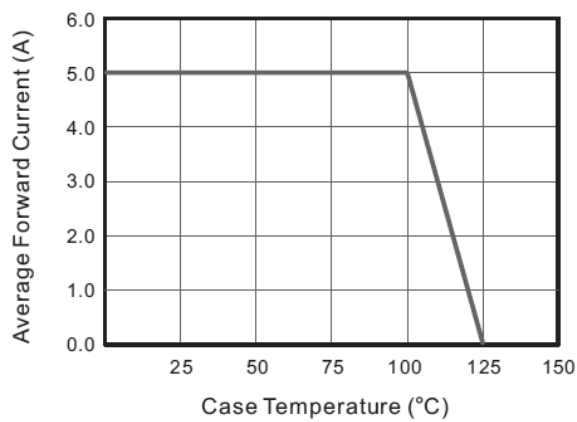


Fig.2 Typical Reverse Characteristics

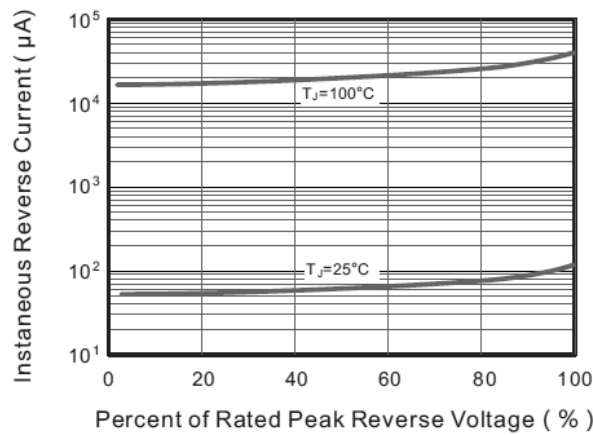


Fig.3 Typical Forward Characteristic

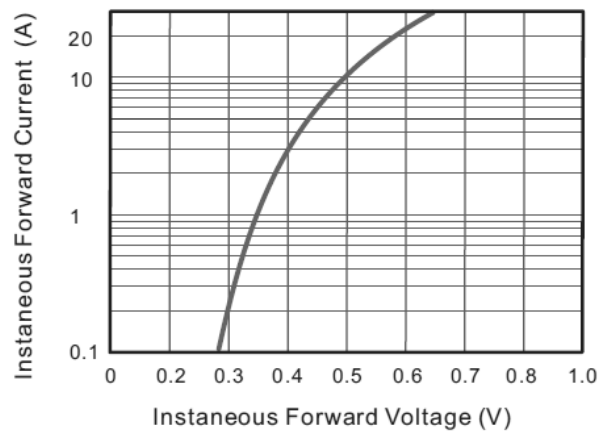


Fig.4 Typical Junction Capacitance

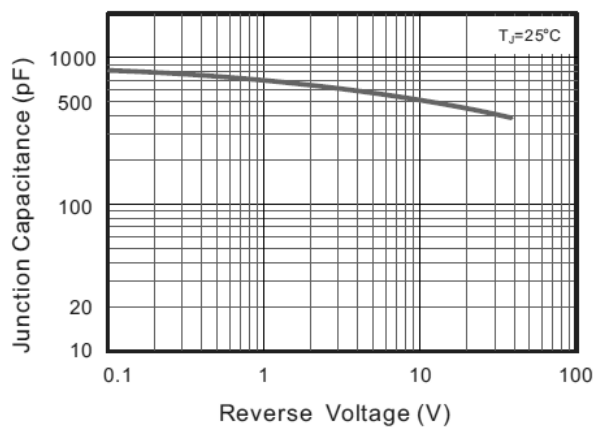


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

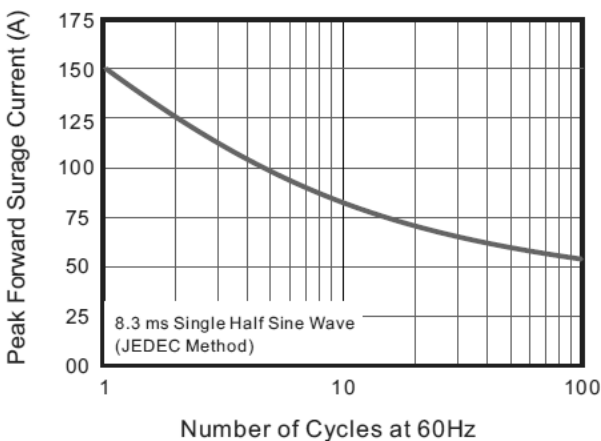
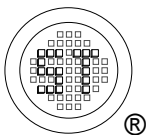
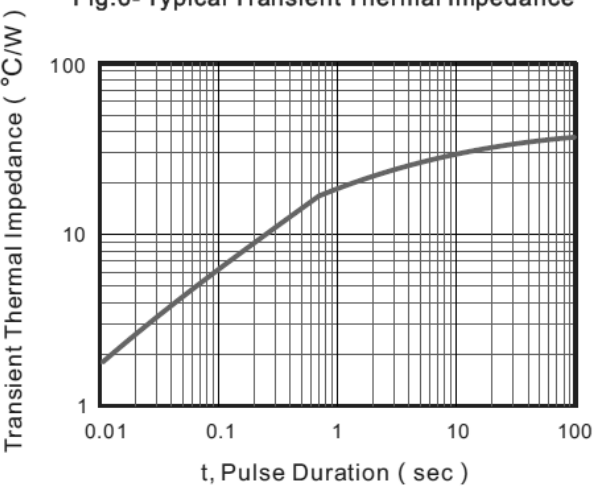


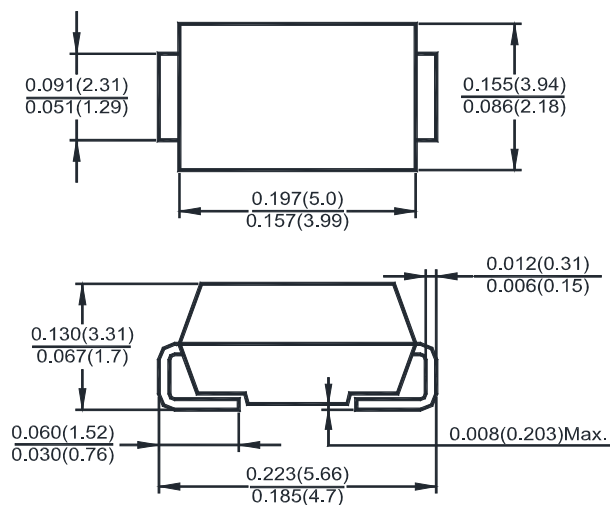
Fig.6 Typical Transient Thermal Impedance



# SSL545B

Package Outline Dimensions in inches (millimeters)

SMB(DO-214AA)



## Marking information

" 545 " = Part No.

" III " = Cathode line

Font type: Arial

