



# SL22B thru SL210B

Surface Mount Schottky Rectifier  
Reverse Voltage 20 - 100V Forward Current 2A

## FEATURES

- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Meets environmental standard MIL-S-19500D
- Moisture sensitivity:level 1, per J-STD-020
- Solder dip 275 °C, 10s
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



Package: DO-214AA (SMB)

## APPLICATIONS

For use in general purpose rectification of lighting, power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.



## PRIMARY CHARACTERISTICS

I <sub>F(AV)</sub>	2 A
V <sub>RRM</sub>	20 V to 100 V
I <sub>FSM</sub>	45A
V <sub>F</sub>	0.42V , 0.47V , 0.72V
T <sub>J</sub> max.	125 °C , 150°C

## MECHANICAL DATA

**Case:** DO-214AA, molded epoxy body , Epoxy meets UL 94V-0 flammability rating

**Terminals:** Matte tin plated leads, solderable per J-STD-002 and JESD22B-106

**Polarity:** Laser Band Denotes Cathode Band

## MAXIMUM RATINGS (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	SL22B	SL23B	SL24B	SL25B	SL26B	SL27B	SL28B	SL29B	SL210B	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	70	80	90	100	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	49	56	63	70	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	70	80	90	100	V
Maximum average forward rectified current at T <sub>L</sub> (See Fig.1)	I <sub>F(AV)</sub>	2								A	
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	45								A	
Operating junction temperature range	T <sub>J</sub>	- 55 to + 125			- 55 to + 150						°C
Storage temperature range	T <sub>STG</sub>	- 55 to + 150								°C	



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## ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	SL22B	SL23B	SL24B	SL25B	SL26B	SL27B	SL28B	SL29B	SL210B	UNIT
Maximum instantaneous forward voltage	IF=2A	V <sub>F</sub>		0.42		0.47		0.72				V
Maximum DC reverse current at rated DC blocking voltage	TA=25	I <sub>R</sub>		0.2			0.15					mA
	TA=100			20			TBD					
Typical junction capacitance	4.0 V, 1 MHz	C <sub>J</sub>				175						pF

## THERMAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	SL22B	SL23B	SL24B	SL25B	SL26B	SL27B	SL28B	SL29B	SL210B	UNIT
Maximum thermal resistance	R <sub>θJA</sub> (1)					72					°C/W
	R <sub>θJT</sub> (2)					22					

Notes: (1) Thermal resistance from junction to ambient, 0.276x 0.276 inch (7.0x7.0mm) copper pads to each terminal

(2) Thermal resistance from junction to terminal, 0.276x0.276 inch (7.0×7.0mm) copper pads to each terminal

## RATINGS AND CHARACTERISTICS CURVES

(TA = 25 °C unless otherwise noted)

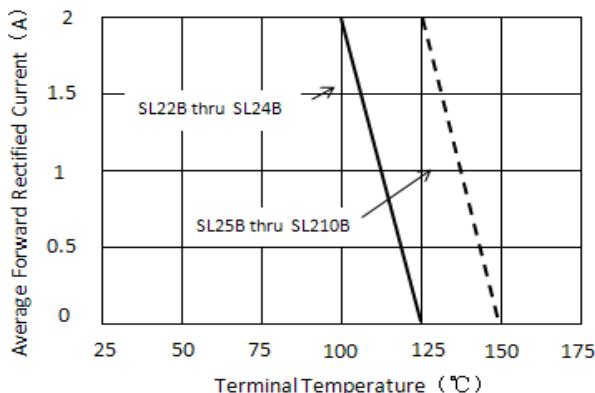


Figure 1. Forward Current Derating Curve



Figure 2. Maximum Non-repetitive Peak Forward Surge Current

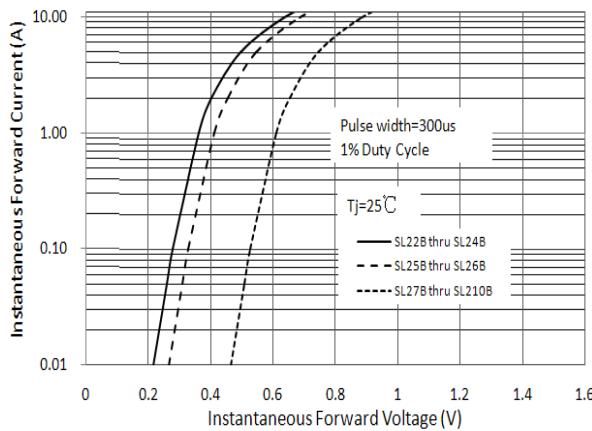


Figure 3. Typical Instantaneous Forward Characteristics

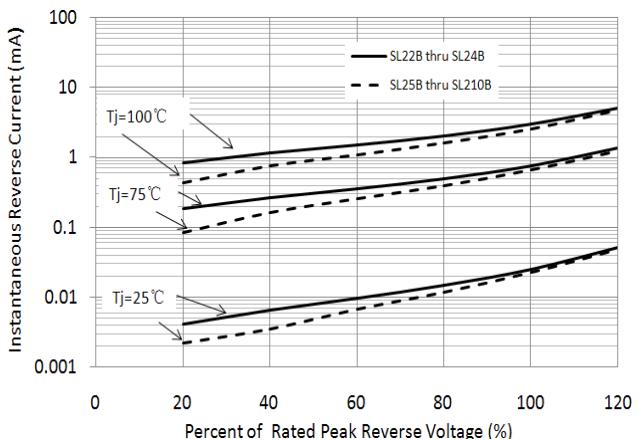


Figure 4. Typical Reverse Characteristics



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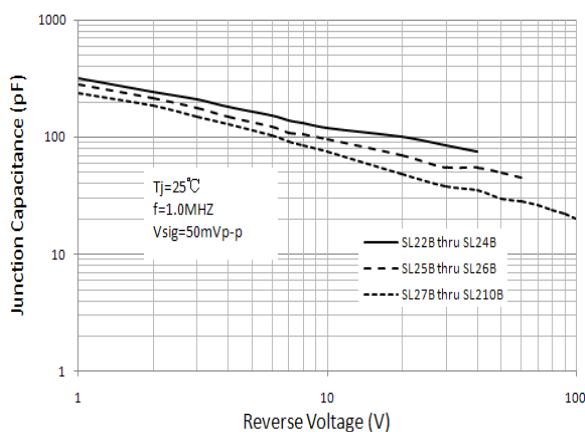


Figure 5. Typical Junction Capacitance

## PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

