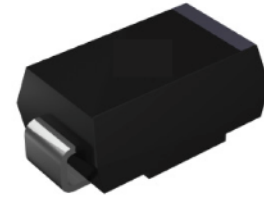


## Features

- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Ideal for automated placement
- Meets environmental standard MIL-S-19500D
- Solder dip 275 °C, 10s



Package: DO-214AA (SMB)

## Applications

For use in general purpose rectification of lighting, power supply, inverter, converter and freewheeling diodes for consumer, automotive and telecommunication.

## 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

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

Parameter	Test Conditions	Symbol	SL22B	SL23B	SL24B	SL25B	SL26B	SL27B	SL28B	SL29B	SL210B	Unit	
Maximum Instantaneous Forward Voltage	I <sub>F</sub> =2 A	V <sub>F</sub>	0.42			0.47		0.72				V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>A</sub> =25°C	I <sub>R</sub>	0.2			0.15						mA	
	T <sub>A</sub> =100°C		20										
Typical Junction Capacitance	4.0 V, 1 MHz	C <sub>J</sub>	175										pF

## Thermal Characteristics

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, 0.276x0.276 inch (7.0x7.0mm) copper pads to each terminal

(2) Thermal resistance from junction to terminal, 0.276x0.276 inch (7.0x7.0mm) copper pads to each terminal

## Ratings and Characteristics Curves

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

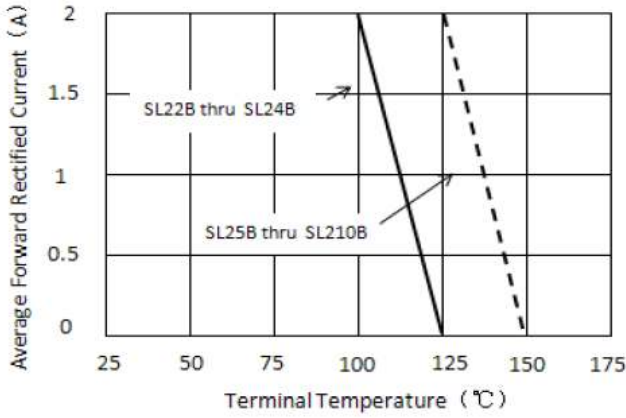


Figure 1. Forward Current Derating Curve

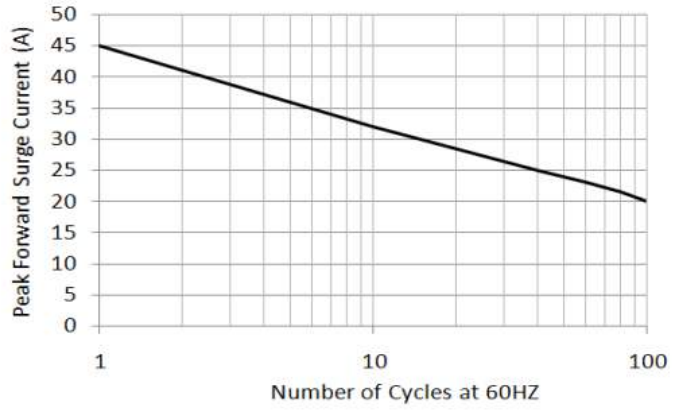


Figure 2. Maximum Non-repetitive Peak Forward Surge Current

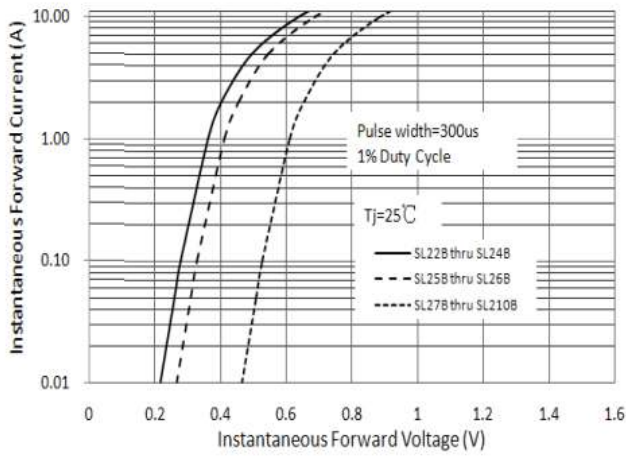


Figure 3. Typical Instantaneous Forward Characteristics

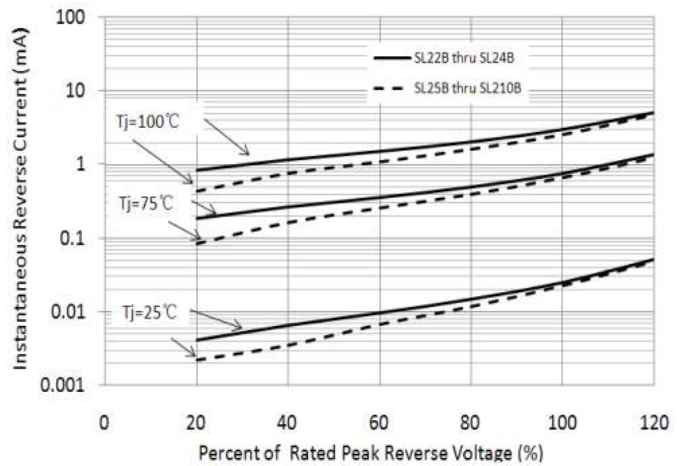


Figure 4. Typical Reverse Characteristics

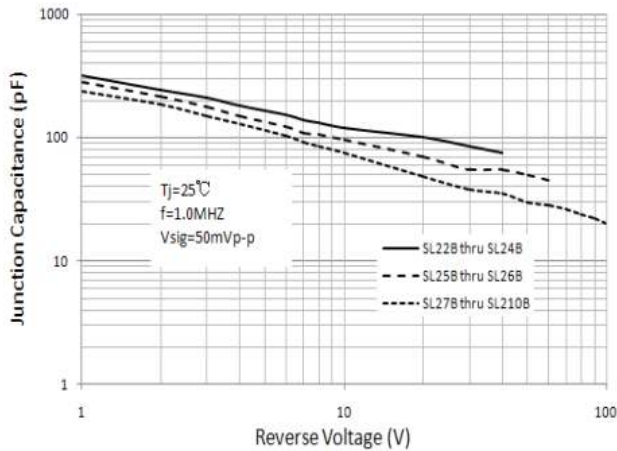
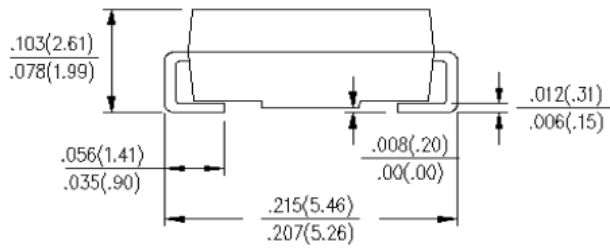
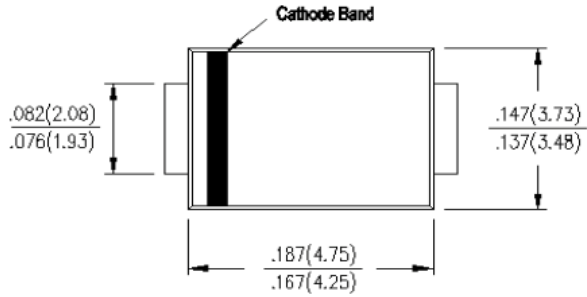


Figure 5. Typical Junction Capacitance

## Package Outline Dimensions

in inches (millimeters)

### DO-214AA (SMB)



### MOUNTING PAD LAYOUT

