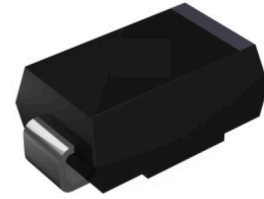


Features

- 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_A = 25°C unless otherwise noted)

Parameter	Symbol	SL22B	SL23B	SL24B	SL25B	SL26B	SL27B	SL28B	SL29B	SL210B	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	70	80	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	49	56	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	70	80	90	100	V
Maximum Average Forward Rectified current at T _L (See Fig.1)	I _{F(AV)}	2									A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	45									A
Operating Junction Temperature Range	T _J	- 55 to + 125				- 55 to + 150					°C
Storage Temperature Range	T _{stg}	- 55 to + 150									°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

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

Thermal Characteristics

Parameter	Symbol	SL22B	SL23B	SL24B	SL25B	SL26B	SL27B	SL28B	SL29B	SL210B	Unit
Maximum thermal resistance	R _{θJA} (1)	72									°C/W
	R _{θJT} (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)

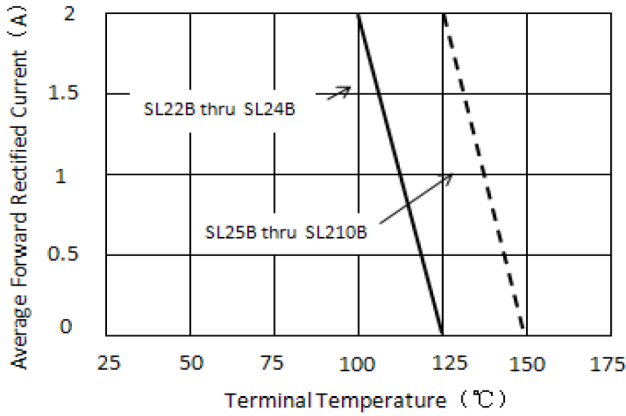


Figure 1. Forward Current Derating Curve

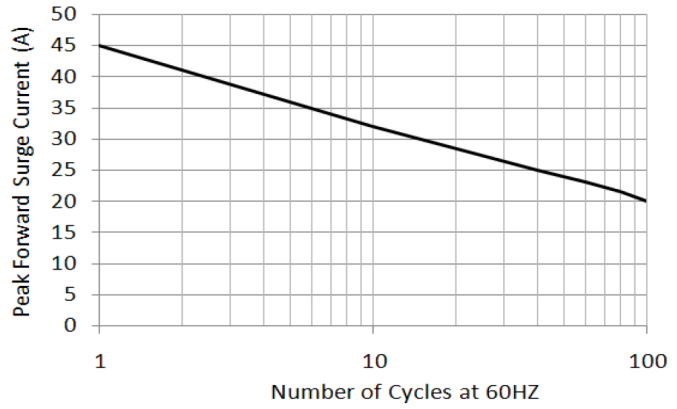


Figure 2. Maximum Non-repetitive Peak Forward Surge Current

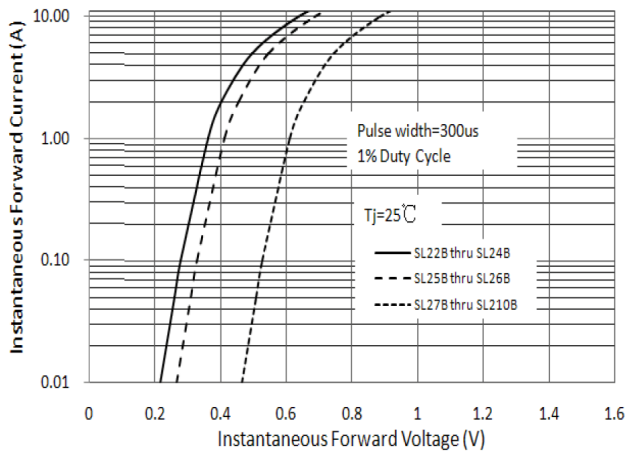


Figure 3. Typical Instantaneous Forward Characteristics

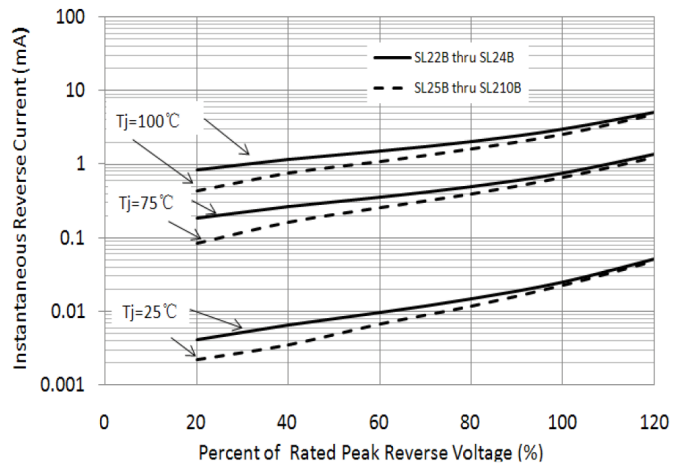


Figure 4. Typical Reverse Characteristics

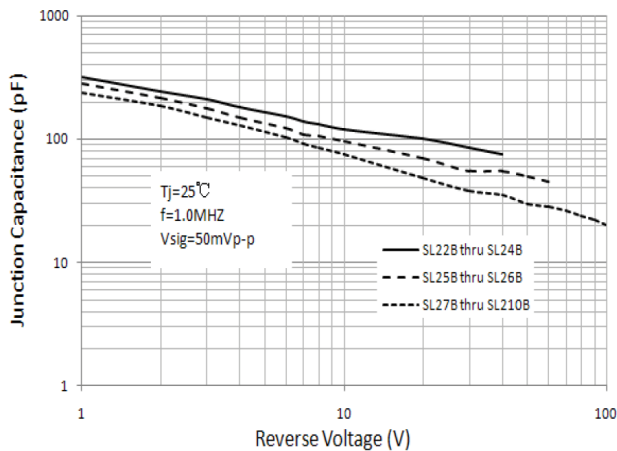
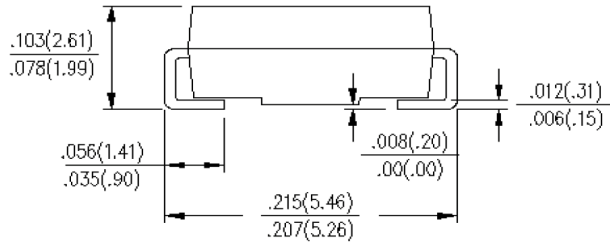
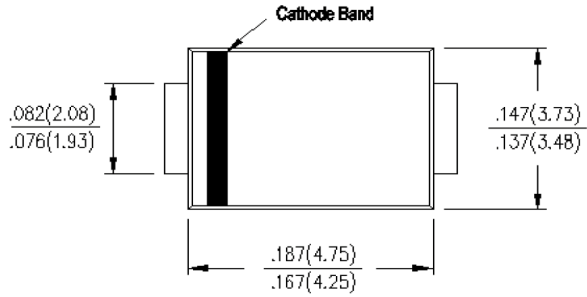


Figure 5. Typical Junction Capacitance

Package Outline Dimensions

in inches (millimeters)

DO-214AA (SMB)



MOUNTING PAD LAYOUT

