

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-214AC (SMA)

Applications

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

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

Parameter	Symbol	SL12A	SL13A	SL14A	SL15A	SL16A	SL17A	SL18A	SL19A	SL110A	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)}	1									A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	30									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 ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Test Conditions	Symbol	SL12A	SL13A	SL14A	SL15A	SL16A	SL17A	SL18A	SL19A	SL110A	Unit
Maximum Instantaneous Forward Voltage	I _F =1 A	V _F	0.42			0.5		0.68				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C T _A =100°C	I _R	0.2			10						mA
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	85									pF

Ratings and Characteristics Curves

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

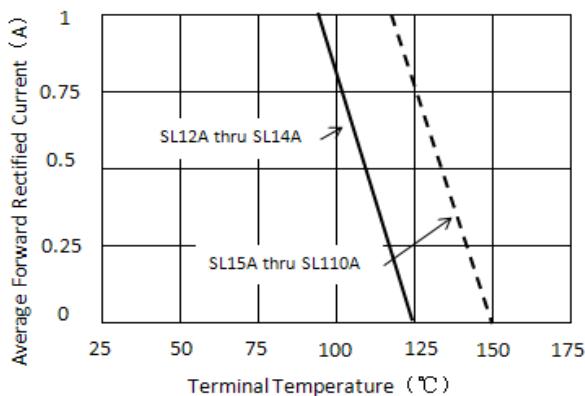


Figure 1. Forward Current Derating Curve

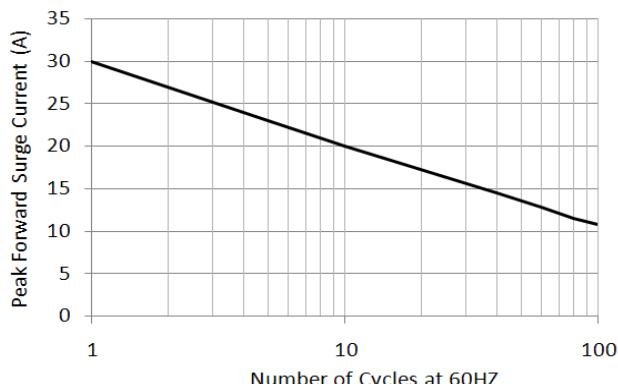


Figure 2. Maximum Non-repetitive Peak Forward Surge Current

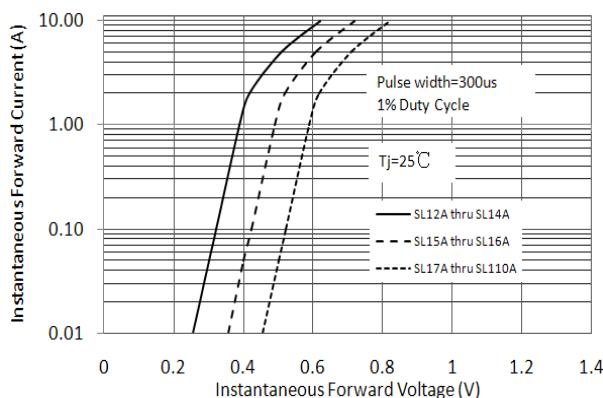


Figure 3. Typical Instantaneous Forward Characteristics

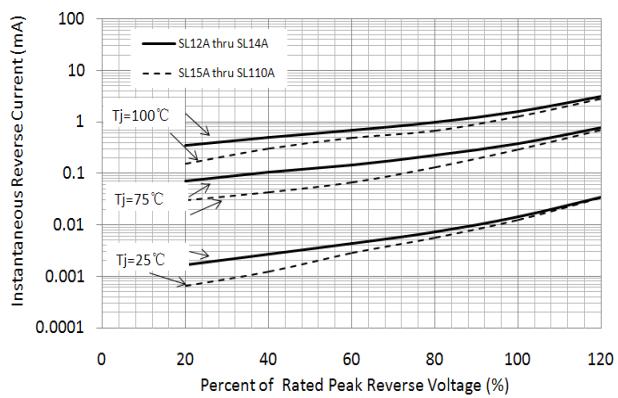


Figure 4. Typical Reverse Characteristics

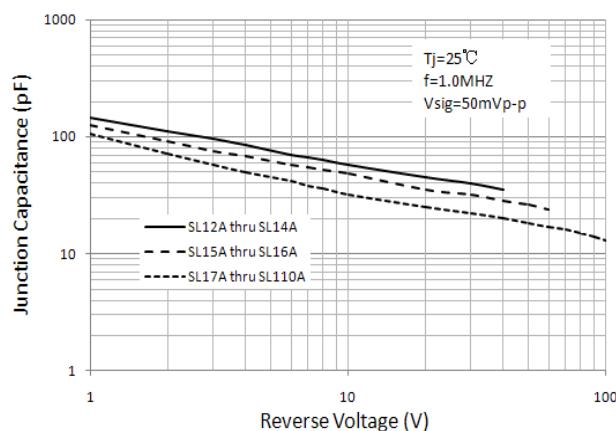
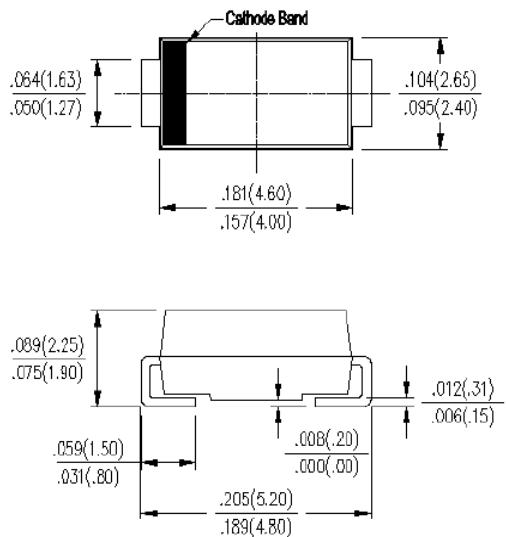


Figure 5. Typical Junction Capacitance

Package Outline Dimensions

in inches (millimeters)



DO-214AC (SMA)

MOUNTING PAD LAYOUT

