

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°C unless otherwise noted)

Parameter	Symbol	SL32A	SL33A	SL34A	SL35A	SL36A	SL37A	SL38A	SL39A	SL310A	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)}	3									A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	80									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	SL32A	SL33A	SL34A	SL35A	SL36A	SL37A	SL38A	SL39A	SL310A	Unit
Maximum Instantaneous Forward Voltage	I _F =3 A	V _F	0.42			0.50		0.75				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	0.2				0.05					mA
	T _A =100°C		50				4					
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	285									pF

Thermal Characteristics

Parameter	Symbol	SL32A	SL33A	SL34A	SL35A	SL36A	SL37A	SL38A	SL39A	SL310A	Unit
Maximum thermal resistance	R _{θJA} (1)	80									°C/W
	R _{θJT} (2)	20									

Notes: (1) Thermal resistance from junction to ambient, 0.197x 0.197 inch (5.0x5.0mm) copper pads to each terminal

(2) Thermal resistance from junction to terminal, 0.197x0.197 inch (5.0x5.0mm) copper pads to each terminal

Ratings and Characteristics Curves

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

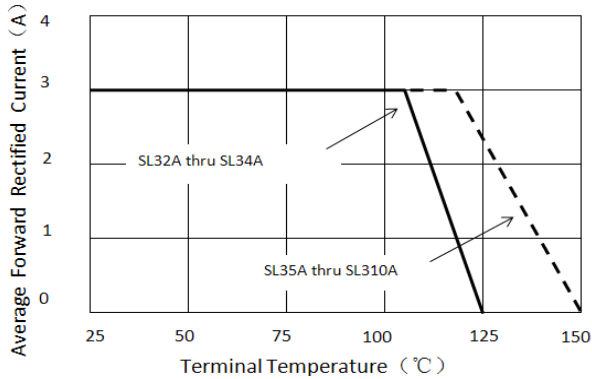


Figure 1. Forward Current Derating Curve

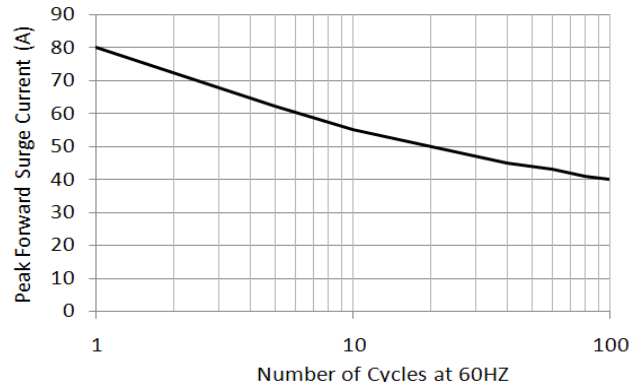


Figure 2. Maximum Non-repetitive Peak Forward Surge Current

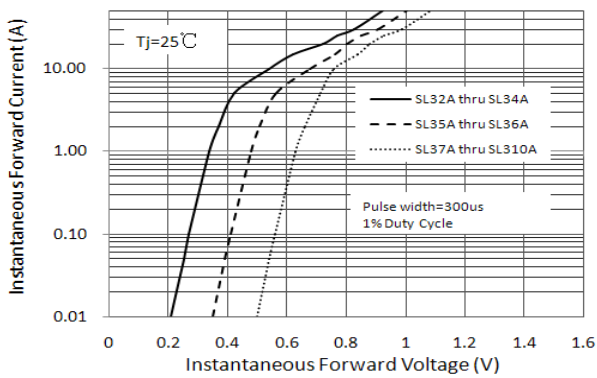


Figure 3. Typical Instantaneous Forward Characteristics

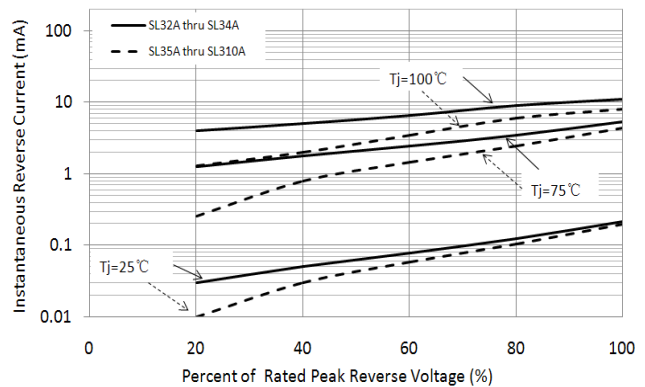


Figure 4. Typical Reverse Characteristics

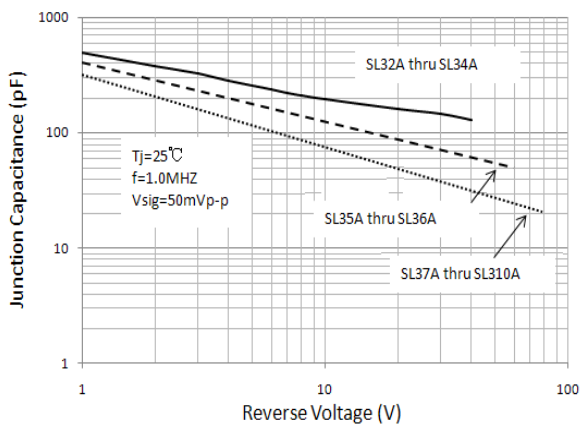
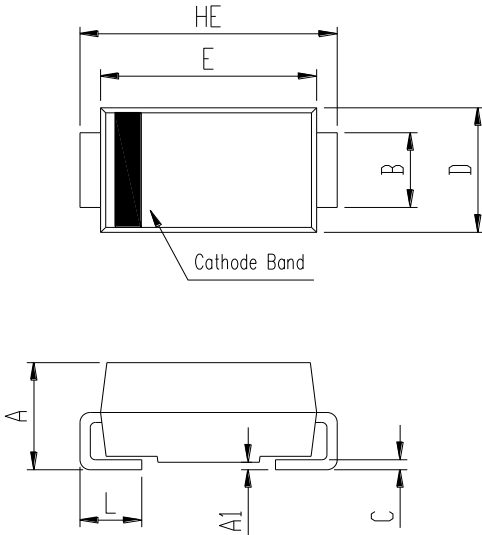


Figure 5. Typical Junction Capacitance

SL32A thru SL310A

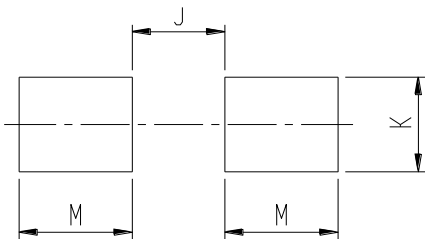
Surface Mount Schottky Rectifier
 Reverse Voltage 20-100V Forward Current 3A

Package Outline Dimensions DO-214AC (SMA)



DIM	SMA (DO-214AC)			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.90	2.25	0.075	0.089
A1	0.00	0.20	0.000	0.008
B	1.27	1.63	0.050	0.064
C	0.15	0.31	0.006	0.012
D	2.40	2.65	0.094	0.104
E	4.00	4.60	0.157	0.181
HE	4.80	5.20	0.189	0.205
L	0.80	1.50	0.031	0.059

Recommended Pad Layout



DIM	Recommended Pad Layout (Reference ONLY)			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	-	2.20	-	0.087
K	1.72	-	0.068	-
M	2.00	-	0.079	-