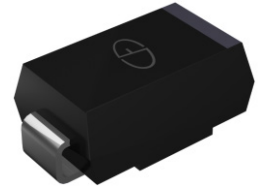


SL12A thru SL110A

Surface Mount Schottky Rectifier
 Reverse Voltage 20-100V Forward Current 1A

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	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°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			0.50		0.68				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	0.2									mA
	T _A =100°C		10									
Typical Junction Capacitance	4.0 V, 1 MHz	C _J						85				pF
Maximum Thermal Resistance		R _{θJA} ¹						90				°C/W
		R _{θJT} ²						16				°C/W

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

(2) Thermal resistance from junction to terminal, 0.197 × 0.197 inch (5.0 × 5.0mm) copper pads to each terminal

Ratings and Characteristics Curves

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

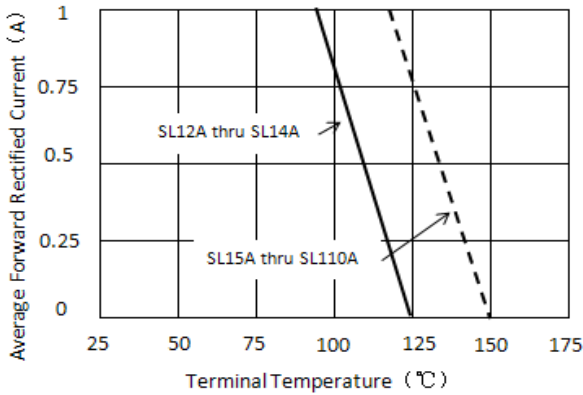


Figure 1. Forward Current Derating Curve



Figure 2. Maximum Non-repetitive Peak Forward Surge Current

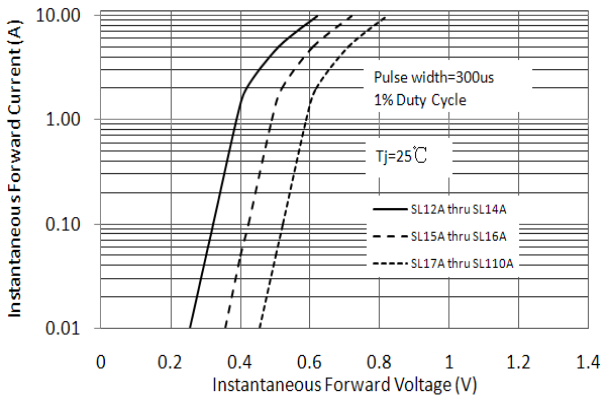


Figure 3. Typical Instantaneous Forward Characteristics

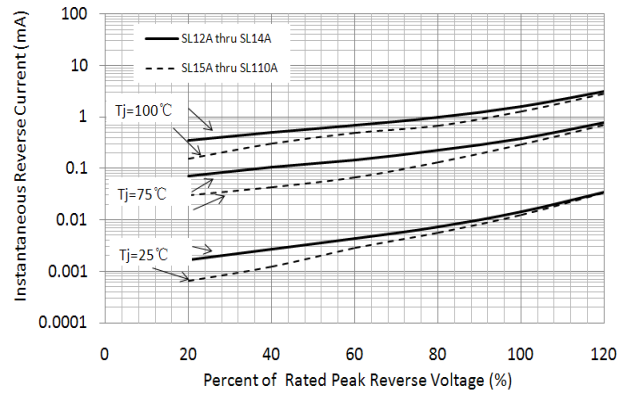


Figure 4. Typical Reverse Characteristics

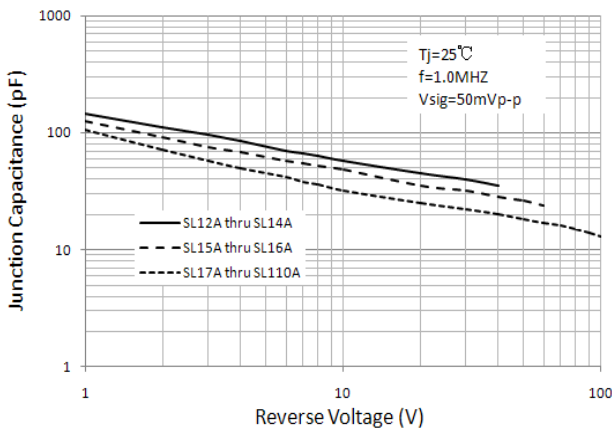


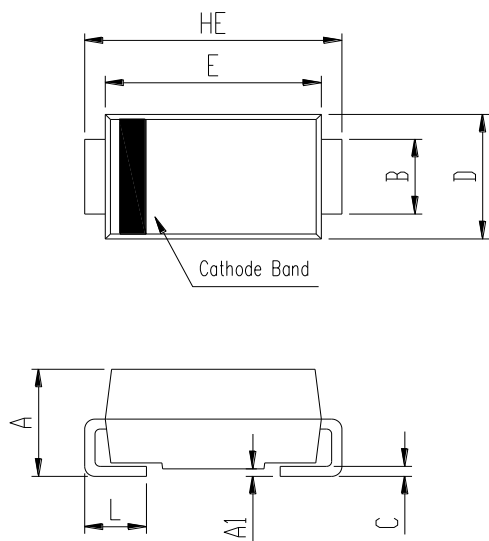
Figure 5. Typical Junction Capacitance

SL12A thru SL110A

Surface Mount Schottky Rectifier
 Reverse Voltage 20-100V Forward Current 1A

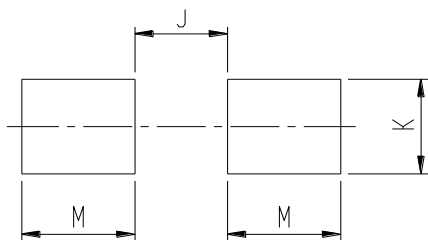
Package Outline Dimensions

DO-214AC (SMA)



SMA (DO-214AC)				
DIM	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

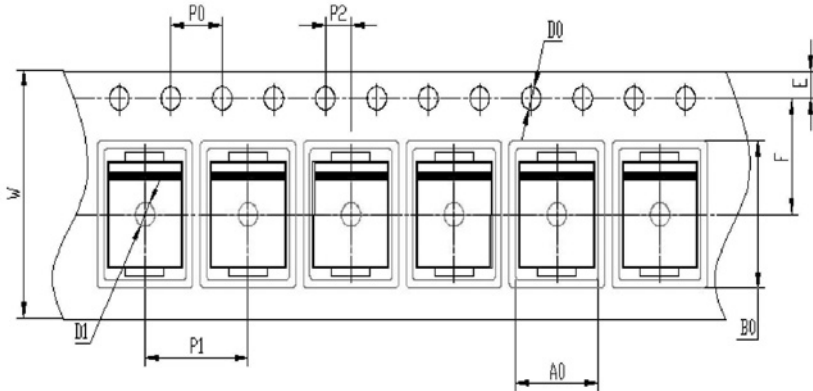


Recommended Pad Layout (Reference ONLY)				
DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	-	2.20	-	0.087
K	1.72	-	0.068	-
M	2.00	-	0.079	-

SL12A thru SL110A

Surface Mount Schottky Rectifier
 Reverse Voltage 20-100V Forward Current 1A

SMA Carrier Tape



Symbol	SMA(mm)
W	12±0.2
E	1.75±0.1
F	5.5±0.05
D0	1.5±0.1
D1	1.50 +0.1/-0
P0	4.0±0.1
P1	4.0±0.1
P2	2.0±0.05
A0	2.65±0.1
B0	5.25±0.1

Reel Quantity

7,500pcs/Reel

SMA Taping Orientation

