GOOD-ARK
SEMICONDUCTOR

SL32C thru SL310C

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

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

RoHS COMPLIANT

Package: DO-214AB (SMC)

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	SL32C	SL33C	SL34C	SL35C	SL36C	SL37C	SL38C	SL39C	SL310C	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	Tstg	- 55 to + 150									°C

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

Parameter	Test Conditions	Symbol	SL32C	SL33C	SL34C	SL35C	SL36C	SL37C	SL38C	SL39C	SL310C	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	220									pF

Thermal Characteristics

Parameter	Symbol	SL32C	SL33C	SL34C	SL35C	SL36C	SL37C	SL38C	SL39C	SL310C	Unit
Maximum Thermal Resistance	$R_{\theta JA}$ (1)	52					75				°C/W
	$R_{\theta JT}$ (2)	17					25				

Notes: (1) Thermal resistance from junction to ambient, 0.315×0.315"(8.0×8.0mm)copper pads to each terminal
(2) Thermal resistance from junction to terminal, 0.315×0.315"(8.0×8.0mm)copper pads to each terminal

Ratings and Characteristics Curves

(T_A = 25°C unless otherwise noted)

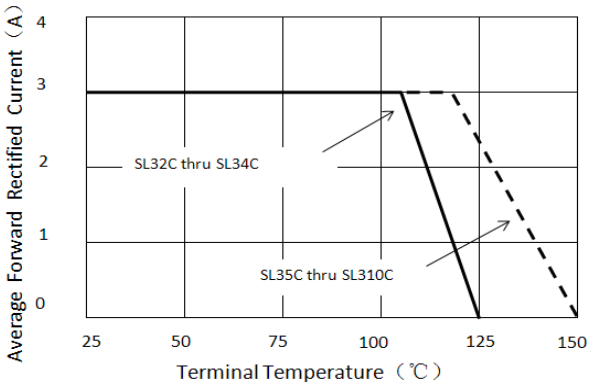

Figure 1. Forward Current Derating Curve

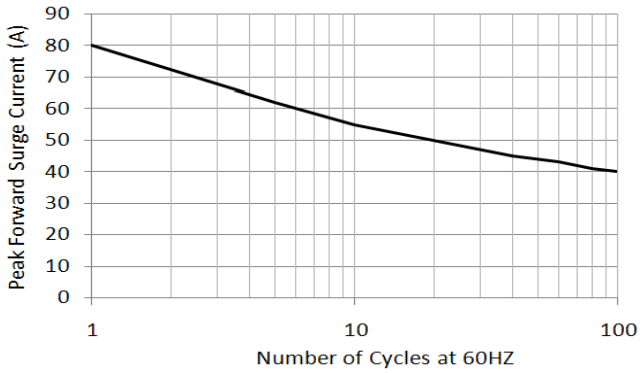

Figure 2.Maximum Non-repetitive Peak Forward Surge Current

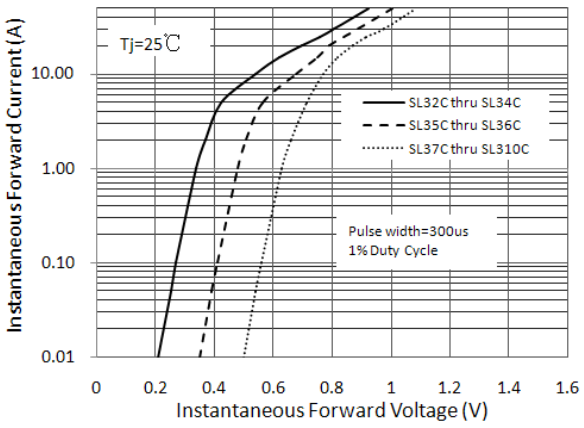

Figure 3. Typical Instantaneous Forward Characteristics

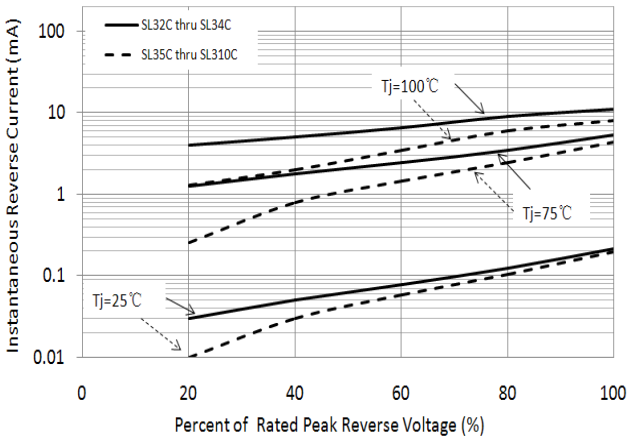

Figure 4. Typical Reverse Characteristics

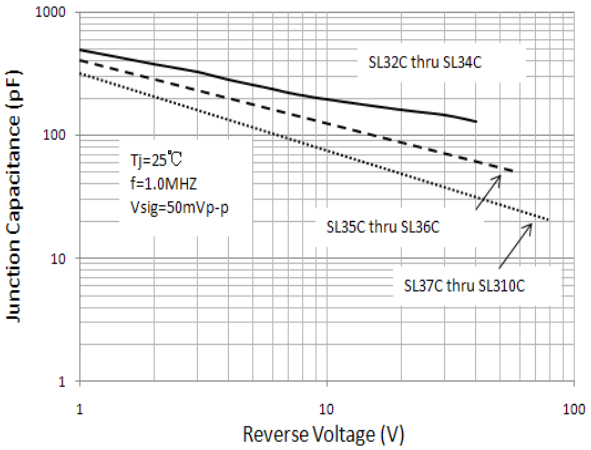

Figure 5. Typical Junction Capacitance

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Package Outline Dimensions

in inches (millimeters)

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