



SL32C thru SL310C

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

FEATURES

- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Meets environmental standard MIL-S-19500D
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 275 °C, 10s
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



Package: DO-214AB (SMC)

APPLICATIONS

For uses in general purpose rectifications of lighting, power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.



RoHS
COMPLIANT

PRIMARY CHARACTERISTICS	
If(AV)	3 A
V _{RRM}	20 V to 100 V
I _{FSM}	80A
V _F	0.42V , 0.5V , 0.75V
T _J max.	125 °C , 150 °C , 175 °C

MECHANICAL DATA

Case: DO-214AB, molded epoxy body , Epoxy meets UL 94V-0 flammability rating

Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22B-106

Polarity: Laser Band Denotes Cathode Band

MAXIMUM RATINGS (TA = 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 TL(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



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ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	SL32C	SL33C	SL34C	SL35C	SL36C	SL37C	SL38C	SL39C	SL310C	UNIT
Maximum instantaneous forward voltage	IF=3 A	V _F	0.42		0.5		0.75					V
Maximum DC reverse current at rated DC blocking voltage	TA=25	I _R		0.2			0.05					mA
	TA=100			50			4					
Typical junction capacitance	4.0 V, 1 MHz	C _J			220							pF

THERMAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	SL32C	SL33C	SL34C	SL35C	SL36C	SL37C	SL38C	SL39C	SL310C	UNIT
Maximum thermal resistance	R _{θJA} (1)		52				75				°C/W
	R _{θJT} (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)

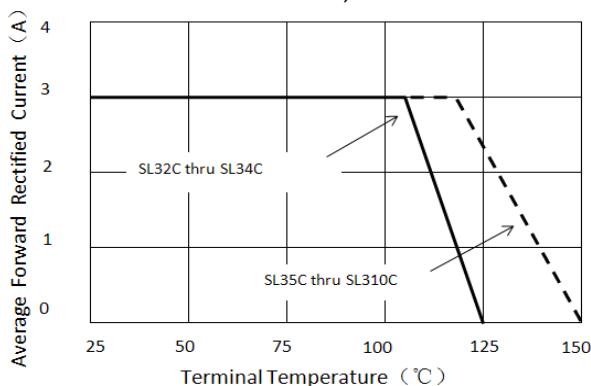


Figure 1. Forward Current Derating Curve

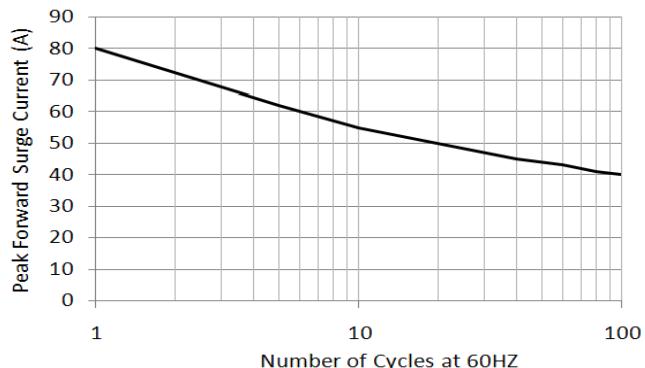


Figure 2. Maximum Non-repetitive Peak Forward Surge Current

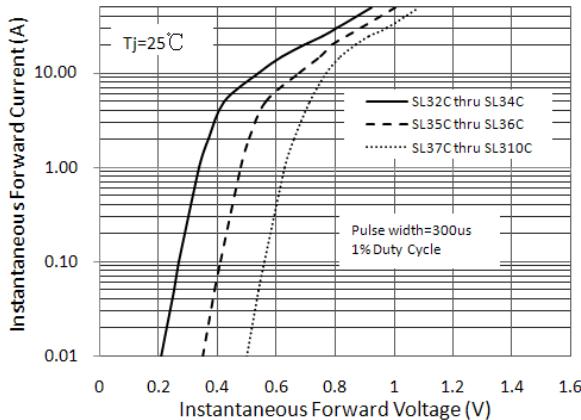


Figure 3. Typical Instantaneous Forward Characteristics

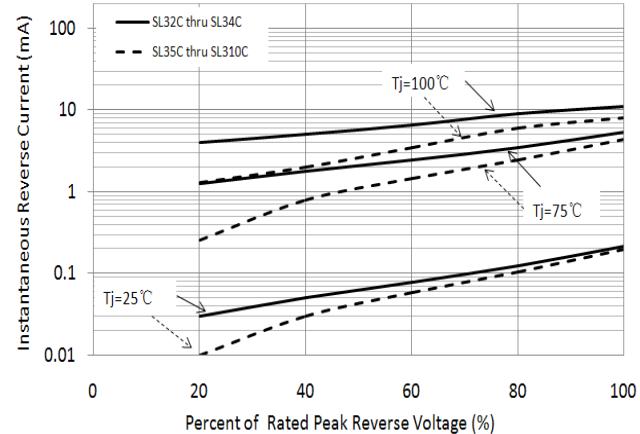
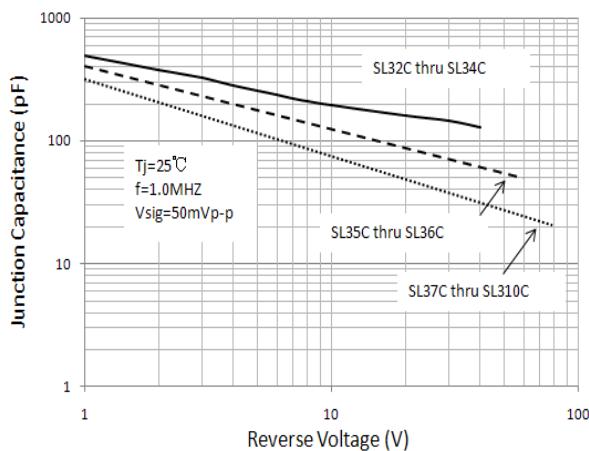


Figure 4. Typical Reverse Characteristics



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PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

