

# SL32 thru SL34

Surface Mount Low  $V_F$  Schottky Barrier Rectifiers  
Reverse Voltage 20 to 40 Volts Forward Current 3.0 Amperes

## Features

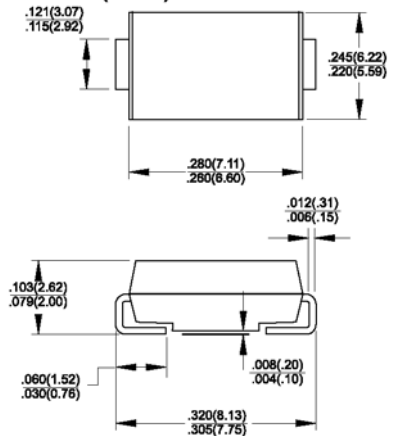
- ◆ For surface mounted application
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low forward voltage drop
- ◆ Easy pick and place
- ◆ High surge current capability
- ◆ Plastic material used carries Underwriters Laboratory Classification 94V-O
- ◆ Epitaxial construction
- ◆ High temperature soldering:  
250°C / 10 seconds at terminals

## Mechanical Data

- ◆ Cases: Molded plastic
- ◆ Terminals: Solder plated
- ◆ Polarity: Indicated by cathode band
- ◆ Weight: 0.09 ounce, 0.25 gram



DO-214AB (SMC)



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbols	SL32	SL33	SL34	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	Volts
Maximum average forward rectified current See Fig. 1	$I_{AV}$	3.0			Amps
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method )	$I_{FSM}$	100.0			Amps
Maximum instantaneous forward voltage @ 3.0A (Note 1)	$V_F$	0.385	0.385	0.400	Volts
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	$I_R$	5.0 250			mA
Maximum thermal resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	17 55			$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55 to +125			$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150			$^\circ\text{C}$

- Notes:**
1. Pulse Test with PW=300µsec, 1% Duty Cycle.
  2. Measured on P.C. Board with 0.2 x 0.2" (5.0 x 5.0 mm) Copper Pad Areas.

# RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

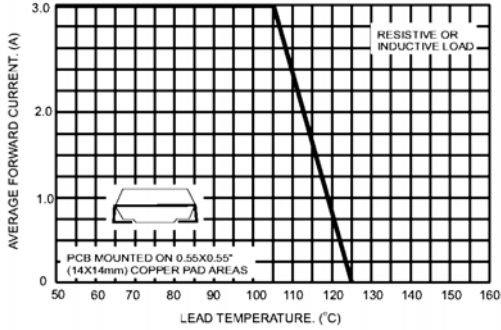


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

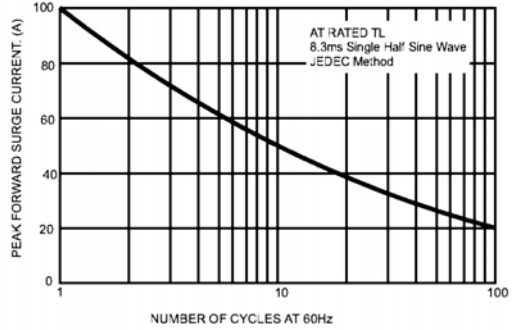


FIG.3- TYPICAL FORWARD CHARACTERISTICS

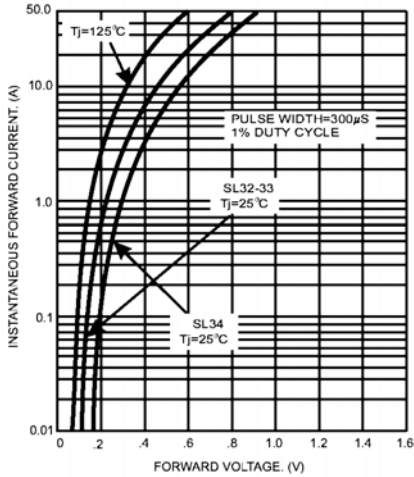


FIG.4- TYPICAL REVERSE CHARACTERISTICS

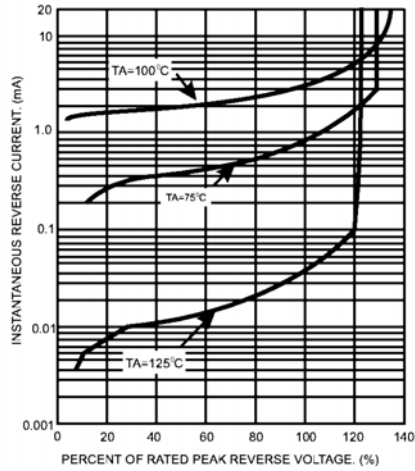


FIG.5- TYPICAL JUNCTION CAPACITANCE

