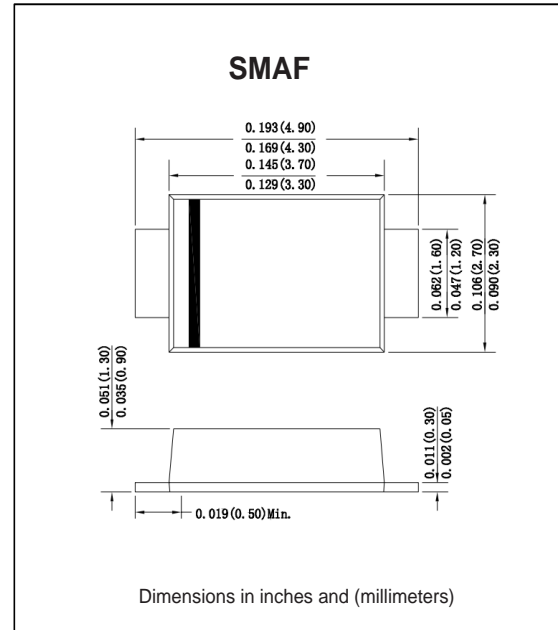


# SS34L~SS310L

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C/10 seconds at terminals



### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SS34L	SS345L	SS35L	SS36L	SS38L	SS310L	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	45	50	60	80	100	V
Maximum RMS voltage	$V_{RMS}$	28	31.5	35	42	56	70	V
Maximum DC blocking voltage	$V_{DC}$	40	45	50	60	80	100	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	3.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	80.0						A
Maximum instantaneous forward voltage at 3.0A	$V_F$	0.48			0.55	0.70		V
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	$I_R$	0.5 50				0.2 20		mA
Typical thermal resistance	$R_{qJA}$	70.0						$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55 to +150						$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150						$^\circ\text{C}$

## Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

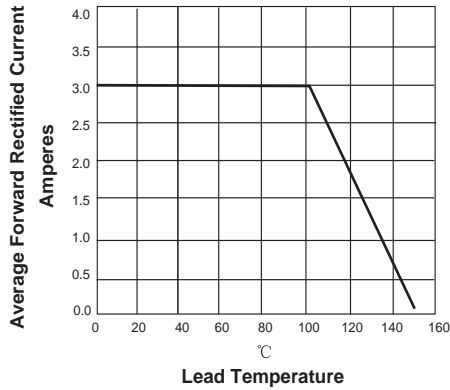


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

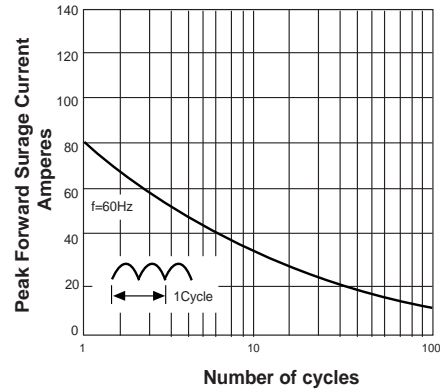


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

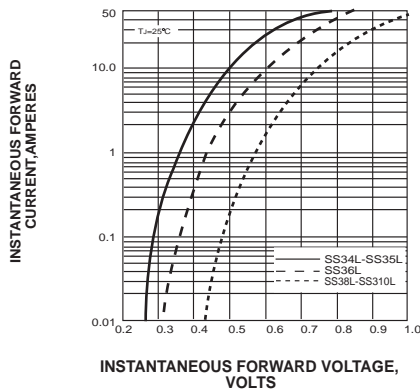
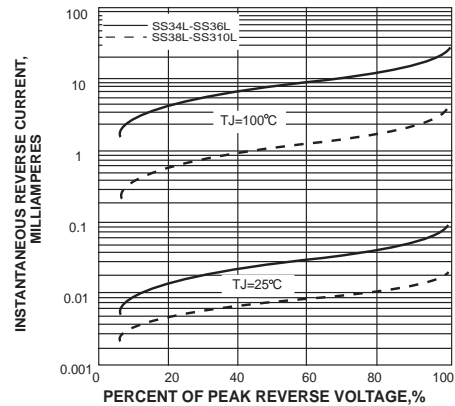
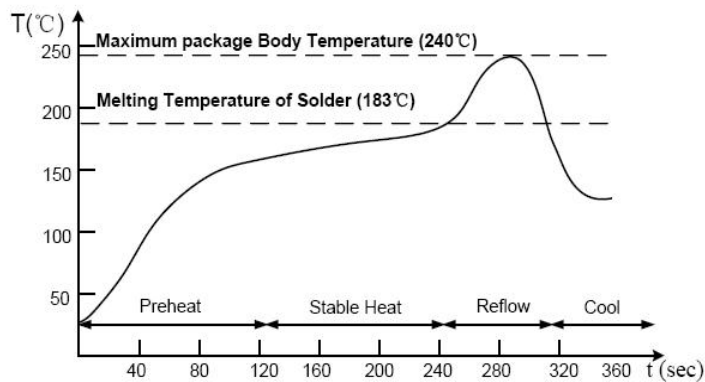


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



## Suggested Soldering Temperature Profile



### Note

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.