

CURRENT 3.0 Ampere  
 VOLTAGE RANG 40 to 200 Volts

## SS34L THRU SS320L

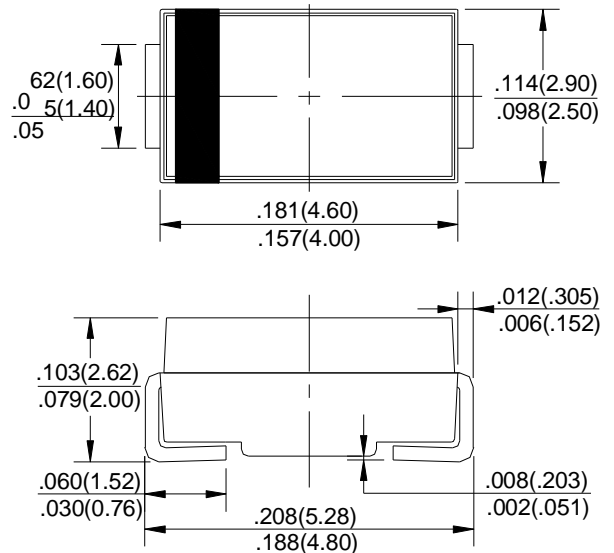
### Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

### Mechanical Date

- **Case:** JEDEC DO-214AC (SMA) molded plastic
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end

### DO-214AC (SMA)



Dimensions in inches and (millimeters)

### 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%.

Type Number	SYMBOL	SS 34L	SS36L	SS38L	SS310L	SS315L	SS320L	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	60	80	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	60	80	100	150	200	V
Average Rectified Output Current @ $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	3.0						A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	80						A
Forward Voltage @ $I_F = 3.0\text{A}$ (Note 1)	$V_{FM}$	0.45	0.5	0.6	0.85			V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	$I_R$	0.2		0.1				mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$		10		5				mA
$I^2t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$	26.56						$\text{A}^2\text{s}$
Typical Junction Capacitance (Note 2)	$C_J$	250						pF
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$	75						$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150						$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150						$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

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

Fig. 1 Forward Current Derating Curve

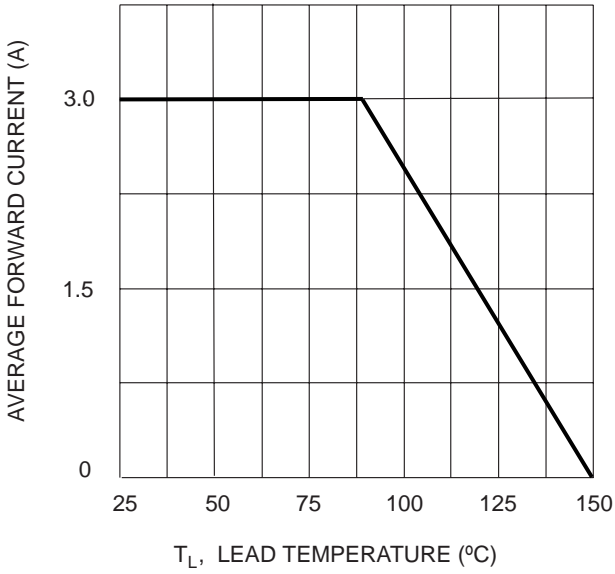


Fig. 2 Typ. Forward Characteristics

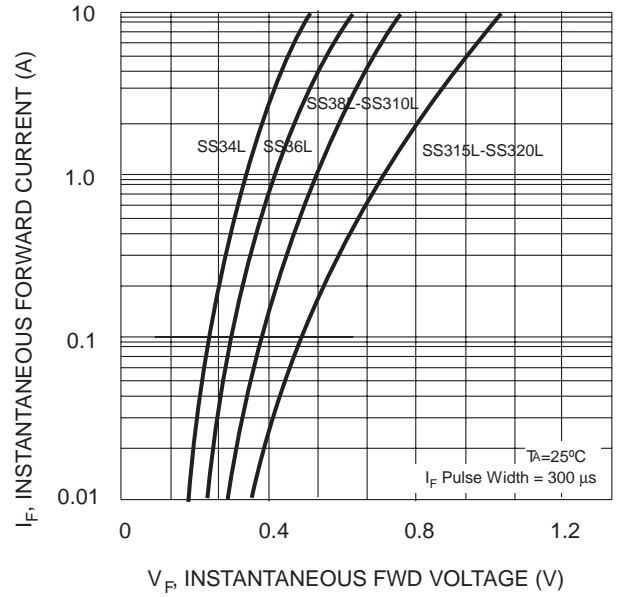


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

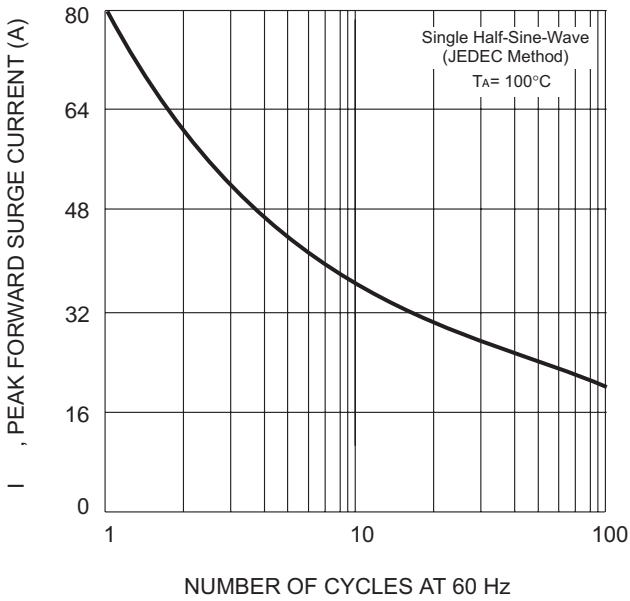
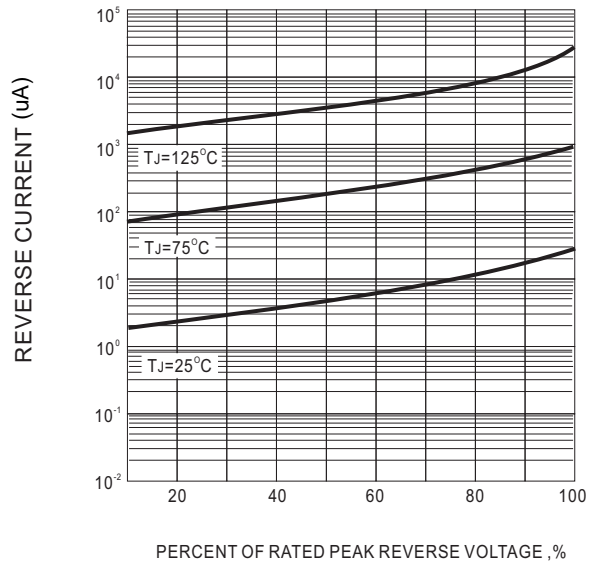


FIG.4 TYPICAL REVERSE CHARACTERISTIC



**SMA PAD LAYOUT**

