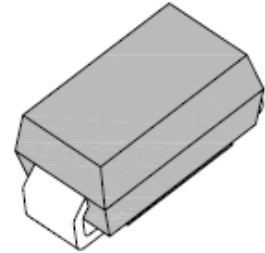


## 1.0A Surface Mount Fast Recovery Rectifier

### Features

- Low profile surface mounted package
- Fast recovery time for high efficiency
- Glass passivated junction
- High temperature soldering: 250 °C / 10 seconds at terminals



SMA

### Mechanical Data

<b>Case:</b>	JEDEC DO-214AC molded plastic
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Solder plated solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes the cathode end
<b>Weight:</b>	0.002 Ounce, 0.064 gram

### Maximum Ratings *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Parameter	SMA4933	SMA4934	SMA4935	SMA4936	SMA4937	Units
<b>VRRM</b>	Max. Recurrent Peak Reverse Voltage	50	100	200	400	600	V
<b>VRMS</b>	Max. RMS Voltage	35	70	140	280	420	V
<b>VDC</b>	Max. DC Blocking Voltage	50	100	200	400	600	V
<b>IF(AV)</b>	Max. Average Forward Output Rectified Current @ TL=50°C	1.0					A
<b>IFSM</b>	Peak Forward Surge Current (Note 1)	30					A
<b>Rθ-JA</b>	Max. Thermal Resistance	105					°C/W
<b>Rθ-JL</b>		32					
<b>TJ,TSTG</b>	Operating Junction and Storage Temperature Range	-55 to 150					°C

# 1.0A Surface Mount Fast Recovery Rectifier

## SMA4933 - SMA4937

### Electrical Characteristics *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Symbol	Parameter	SMA4933	SMA4934	SMA4935	SMA4936	SMA4937	Units	
<b>V<sub>F</sub></b>	Max. Instantaneous Forward Voltage Drop @I <sub>O</sub> =1.0A	1.2						V
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>A</sub> =25°C		5.0			μA	
		T <sub>A</sub> =125°C		100				
<b>T<sub>rr</sub></b>	Max. Recovery Time (Note 2)	200						ns
<b>C<sub>J</sub></b>	Typical Junction Capacitance (Note 3)	10						pF

#### Notes:

- 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
- Reverse recovery test condition: I<sub>F</sub>=1.0A, V<sub>R</sub>=30V, di/dt=50A/μs, and I<sub>rr</sub>=10% I<sub>R</sub> (max.) for measurement of T<sub>rr</sub>
- Measured at 1MHz and applied reverse voltage of 4.0VDC

### Typical Characteristics *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

Fig.1- Forward Current Derating Curve

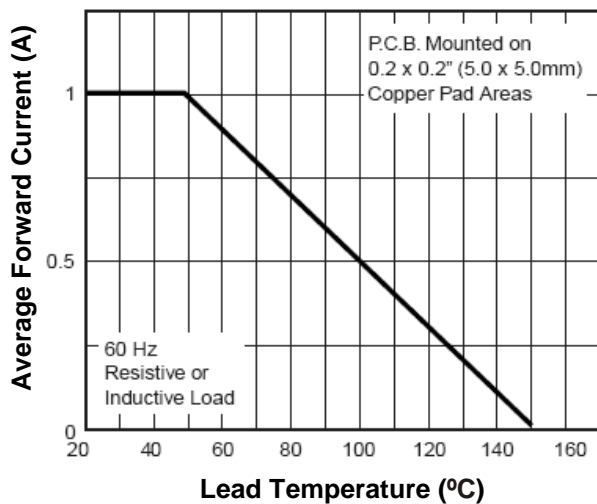
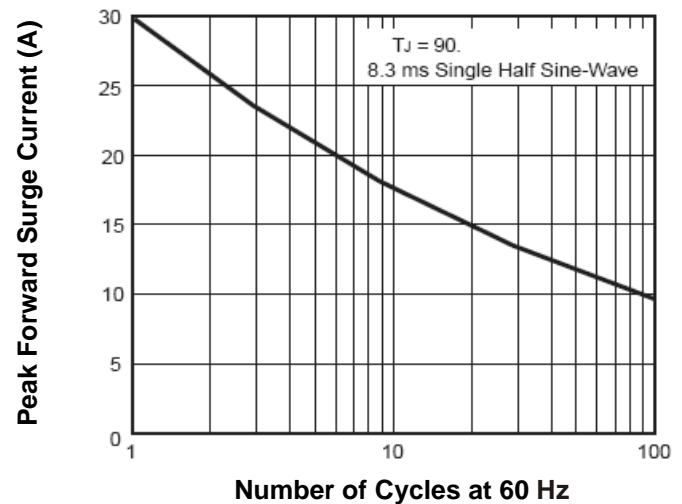


Fig. 2- Maximum Non-Repetitive Peak Forward Surge Current



# 1.0A Surface Mount Fast Recovery Rectifier

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Fig.3- Typical Instantaneous Forward Characteristics

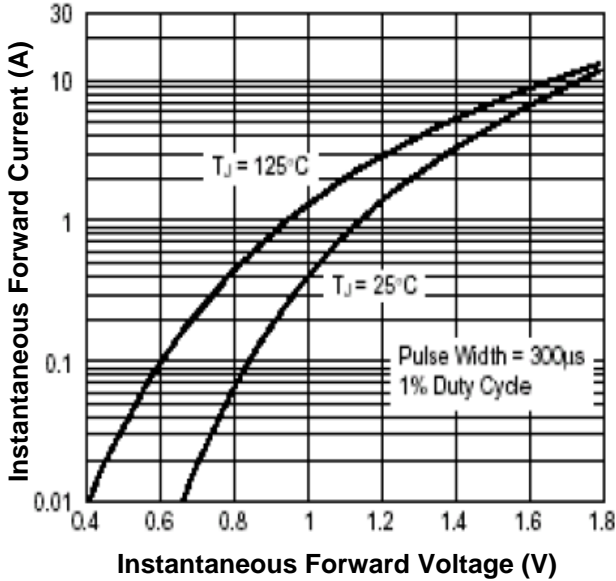


Fig.4- Typical Reverse Characteristics

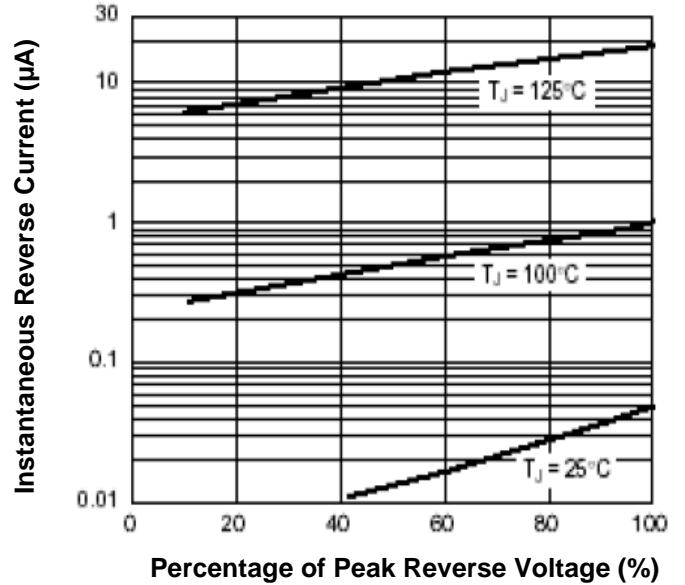
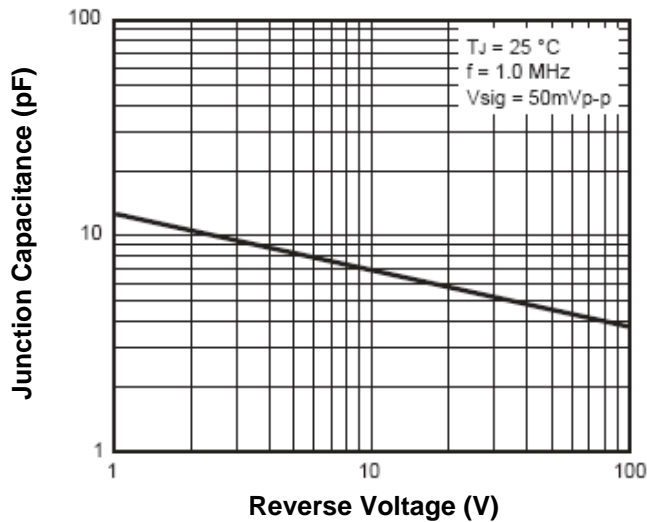


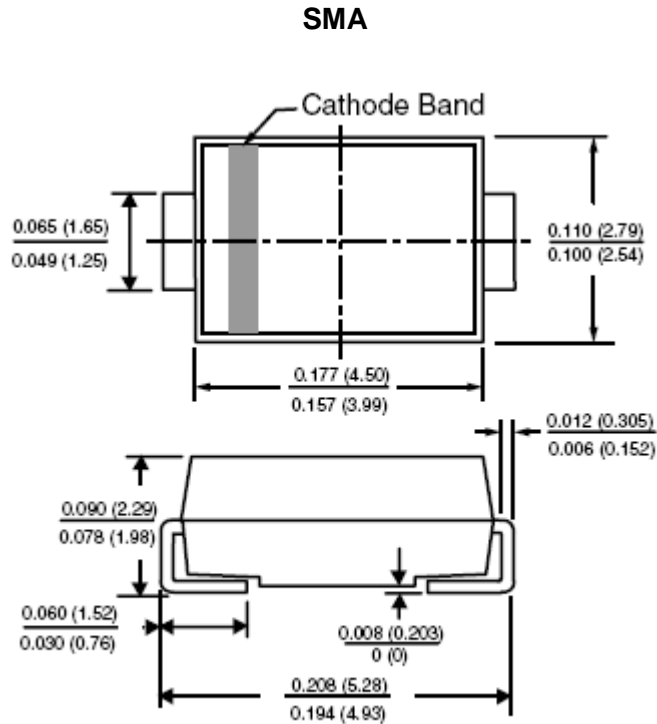
Fig.5- Typical Junction Capacitance



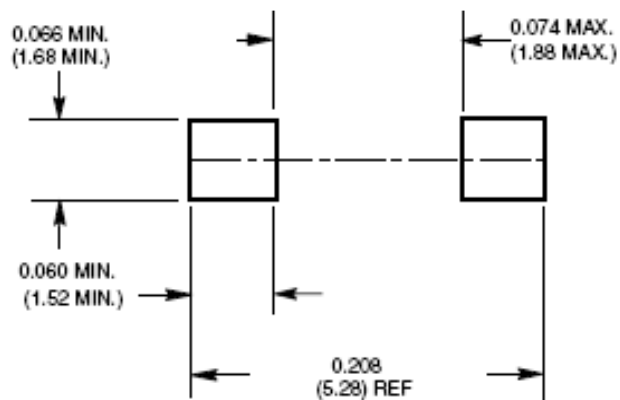
# 1.0A Surface Mount Fast Recovery Rectifier

## SMA4933 - SMA4937

### Dimensions in inch (mm)



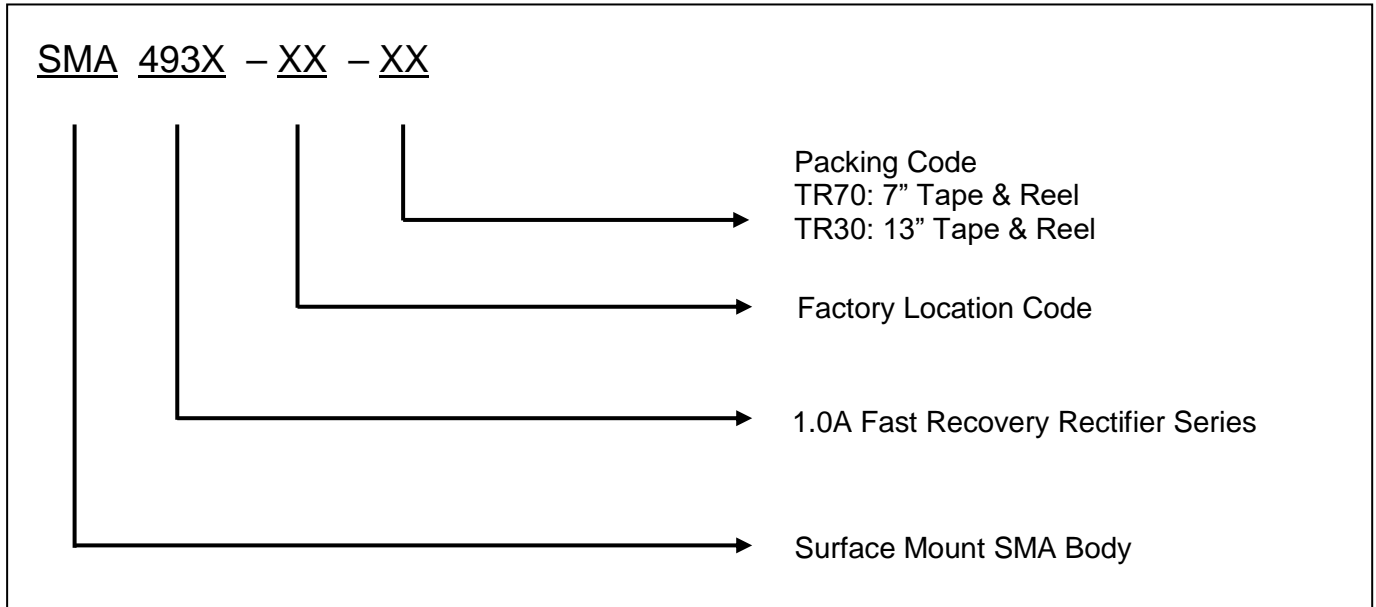
### Mounting Pad Layout in inch (mm)



# 1.0A Surface Mount Fast Recovery Rectifier

## SMA4933 - SMA4937

### Ordering Information



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