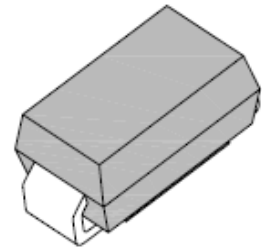


## 1.0A Surface Mount Fast Recovery Rectifier

### Features

- Low profile surface mounted package
- Fast recovery time for high efficiency
- Glass passivated junction
- Plastic package has underwriters laboratory flammability classification 94 V-0
- High temperature soldering: 250 °C / 10 seconds at terminals
- RoHS compliant



SMA



### Mechanical Data

<b>Case:</b>	JEDEC DO-214AC molded plastic
<b>Terminals:</b>	Solder plated solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	cathode end indicated by color band
<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>Io</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 ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

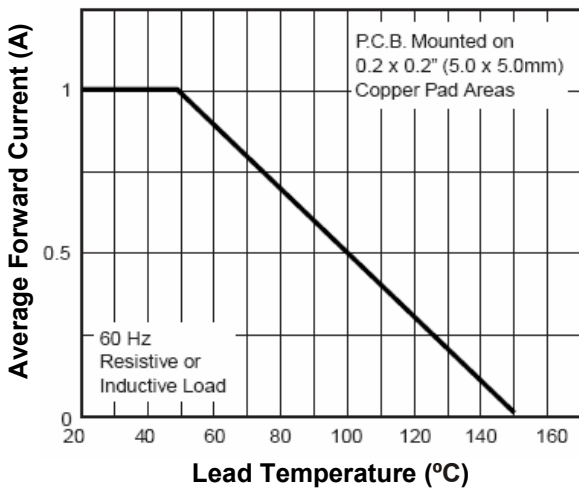
Symbol	Parameter	SMA4933	SMA4934	SMA4935	SMA4936	SMA4937	Units
$V_F$	Max. Instantaneous Forward Voltage Drop @ $I_O=1.0A$	1.2					V
$I_R$	Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}C$		5.0			$\mu A$
		$T_A=125^{\circ}C$		100			
$T_{rr}$	Max. Recovery Time (Note 2)	200					ns
$C_J$	Typical Junction Capacitance (Note 3)	10					pF

**Notes:**

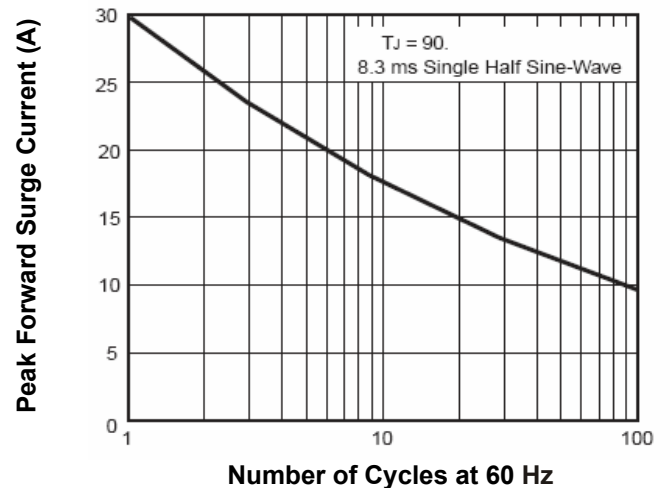
- 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
- Reverse recovery test condition:  $I_F=1.0A, V_R=30V, di/dt=50A/\mu s,$  and  $I_{rr}=10\% I_R$  (max.) for measurement of  $T_{rr}$
- Measured at 1MHz and applied reverse voltage of 4.0VDC

### Typical Characteristics ( $T_{Ambient}=25^{\circ}C$ 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

## SMA4933 - SMA4937

Fig.3- Typical Instantaneous Forward Characteristics

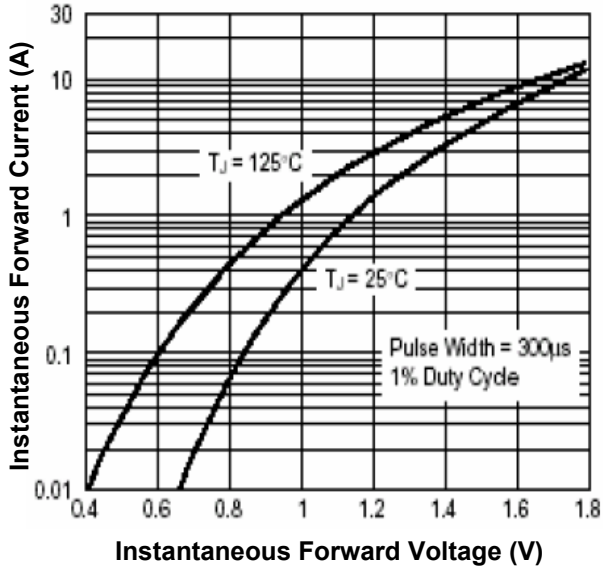


Fig.4- Typical Reverse Characteristics

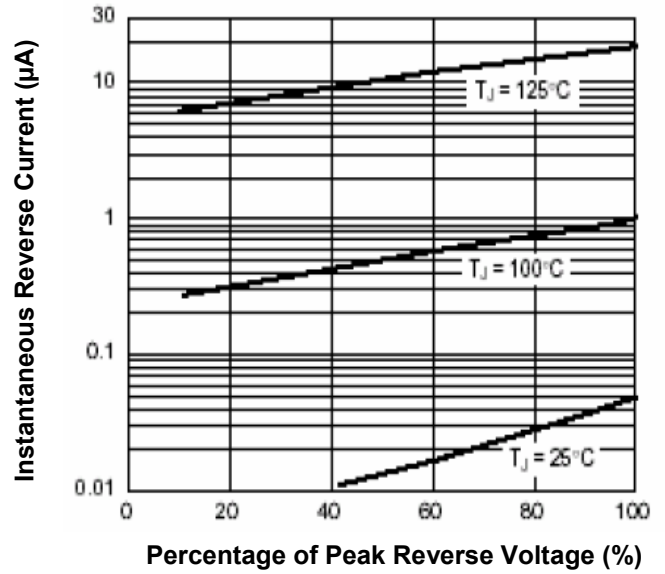
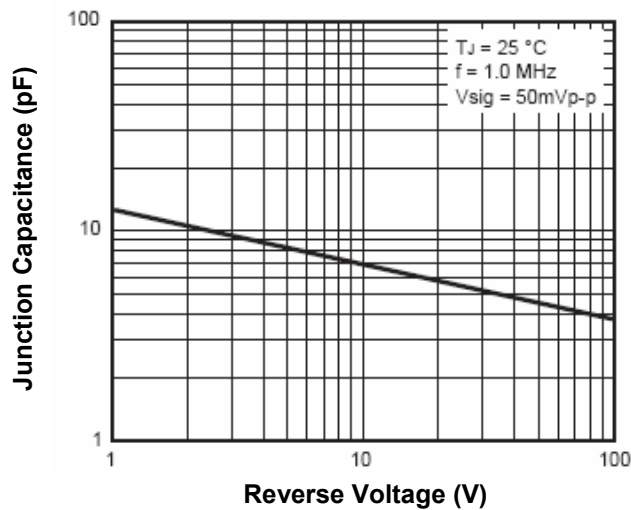


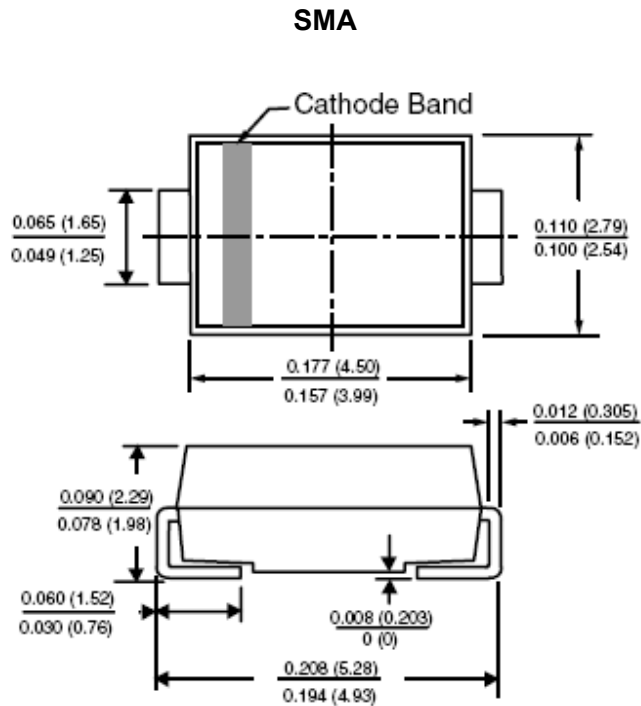
Fig.5- Typical Junction Capacitance



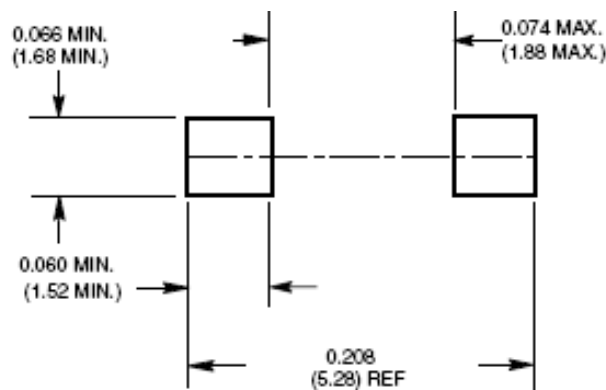
# 1.0A Surface Mount Fast Recovery Rectifier

## SMA4933 - SMA4937

### Dimensions in inch (mm)



### Mounting Pad Layout in inch (mm)



# 1.0A Surface Mount Fast Recovery Rectifier

## SMA4933 - SMA4937

### How to contact us:

#### **US HEADQUARTERS**

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 247-2232 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)

Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

#### **TAITRON COMPONENTS MEXICO, S.A .DE C.V.**

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.

42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

#### **TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA**

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

#### **TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE**

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931