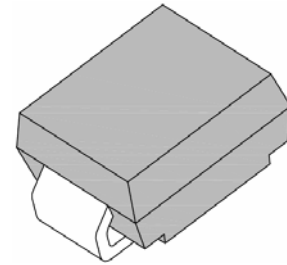


### 3.0A Surface Mount Rectifier

#### Features

- Glass passivated junction
- Plastic package has underwriters laboratory flammability classification 94 V-0
- High temperature soldering: 250 °C / 10 seconds at terminals
- RoHS compliant



**SMB**  
**(DO-214AA)**



#### Mechanical Data

<b>Case:</b>	JEDEC DO-214AA 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>	0.003 Ounce, 0.093 gram

#### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted)

Symbol	Description	S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	Unit	Conditions
<b>V<sub>RRM</sub></b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>V<sub>RMS</sub></b>	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
<b>V<sub>DC</sub></b>	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
<b>I<sub>AV</sub></b>	Maximum Average Forward Rectified Current @TL=103°C	3.0							A	Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0 mm) copper pad area
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	100							A	8.3ms single half sine-wave superimposed on rated load (JEDEC method)
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							µA	TA = 25 °C
		250								TA = 125 °C
<b>T<sub>J</sub>,T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-55 to 150							°C	

## 3.0A Surface Mount Rectifier

### S3AB-S3MB

#### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted)

Symbol	Description	S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	Unit	Conditions
$V_F$	Maximum Instantaneous Forward Voltage	1.15							V	$I_F$ at 2.5 A
$T_{rr}$	Typical Reverse Recovery Time	2.5							$\mu S$	$I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A$
$C_J$	Typical Junction Capacitance	60							pf	Measured at 1.0 MHz and Applied $V_r = 4.0$ volts.
$R_{\theta-JA}$	Maximum Thermal Resistance	47							$^{\circ}C/W$	Mounted on 0.3" x 0.3" (8mmx8mm) copper pad area
$R_{\theta-JL}$		13								

#### Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

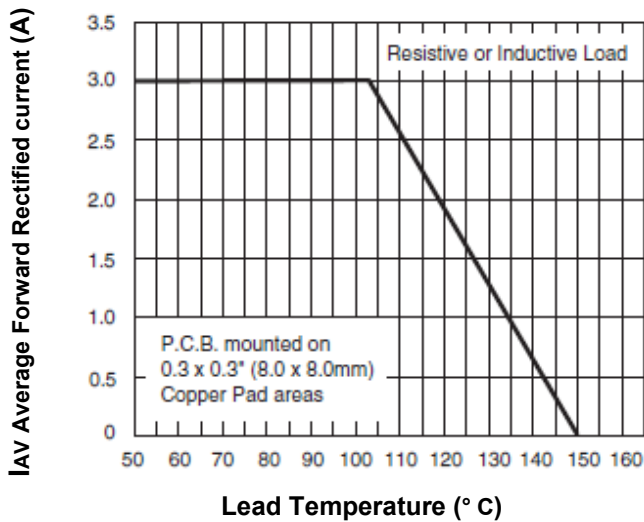
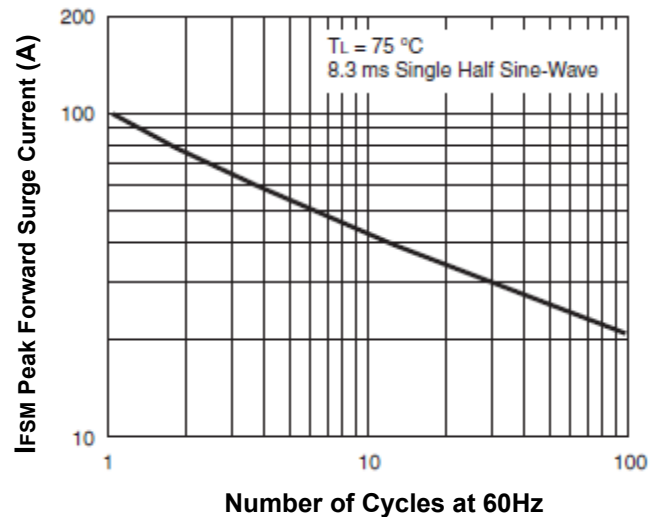


Fig.2-Max. Non-Repetitive Forward Surge Current



# 3.0A Surface Mount Rectifier

## S3AB-S3MB

Fig.3- Typical Instantaneous Forward Characteristics

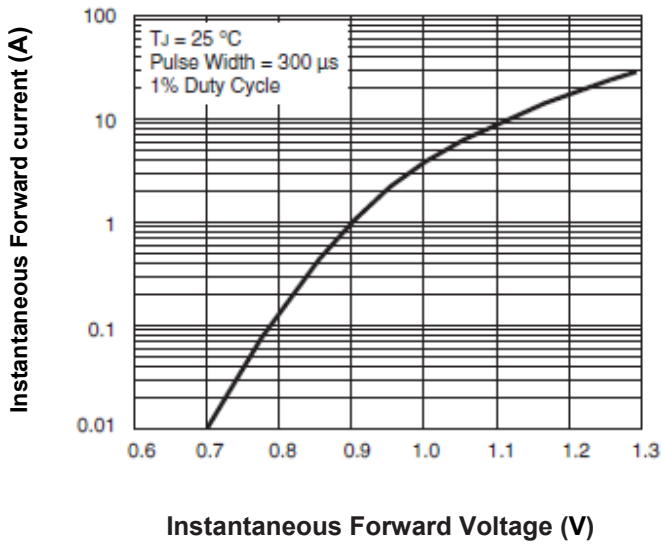


Fig.4- Typical Reverse Characteristics

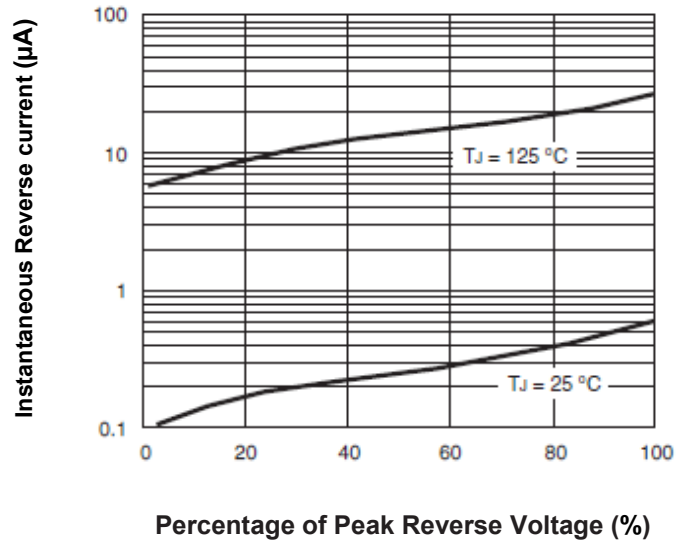
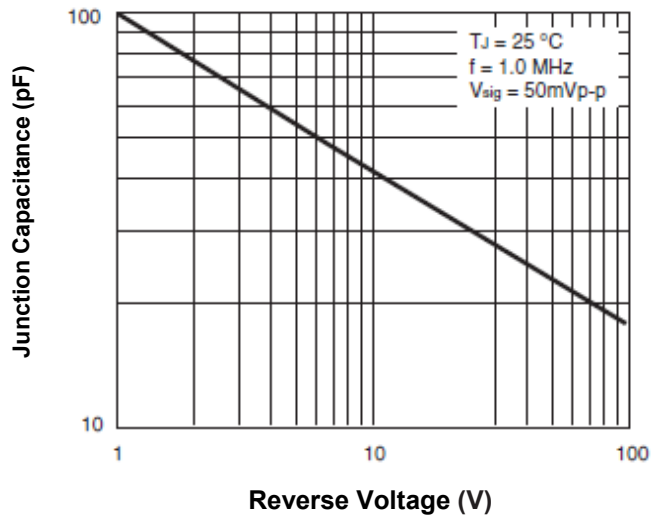


Fig.5- Junction Capacitance

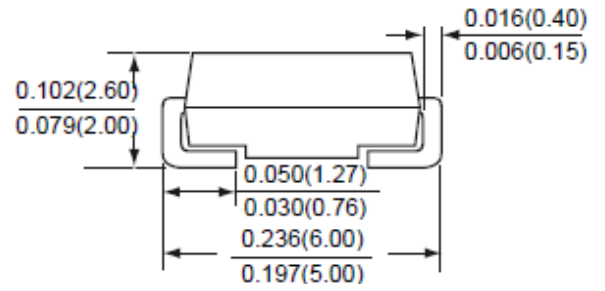
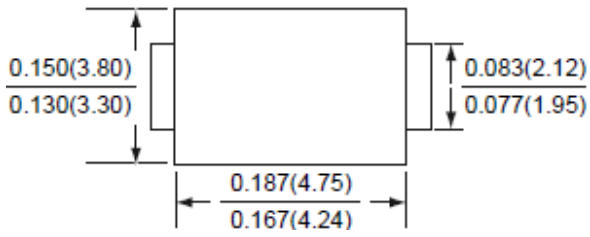


# 3.0A Surface Mount Rectifier

## S3AB-S3MB

### Dimensions in inch (mm)

#### SMB (DO214AA)



#### How to contact us:

**US HEADQUARTERS**

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (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 COMPONETS INCORPORATED E 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 COMPONETS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE**

CROSS REGION PLAZA, 899 LINGLING ROAD, SUITE 18C, SHANGHAI, 200030, CHINA

Tel: +86-21-54249942

Fax: +86-21-5424-9931