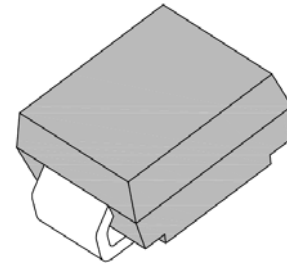


### 3.0A Surface Mount Rectifier

#### 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>F(AV)</sub></b>	Maximum Average Forward Rectified Current @ $T_L=103^{\circ}C$	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							$\mu A$	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	$I_F=2.5A$
$T_{rr}$	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

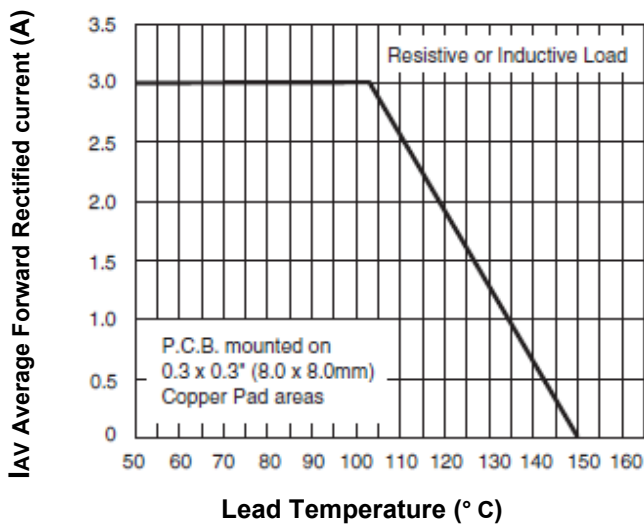
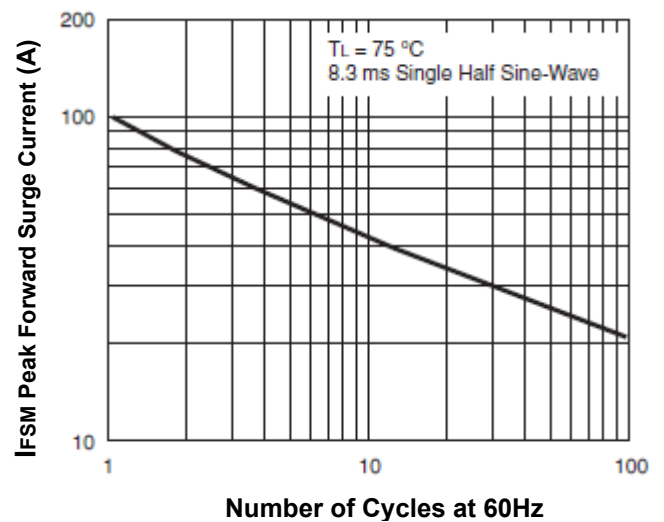


Fig.2-Max. Non-Repetitive Forward Surge Current



# 3.0A Surface Mount Rectifier

## S3AB - S3MB

Fig.3- Typical Instantaneous Forward Characteristics

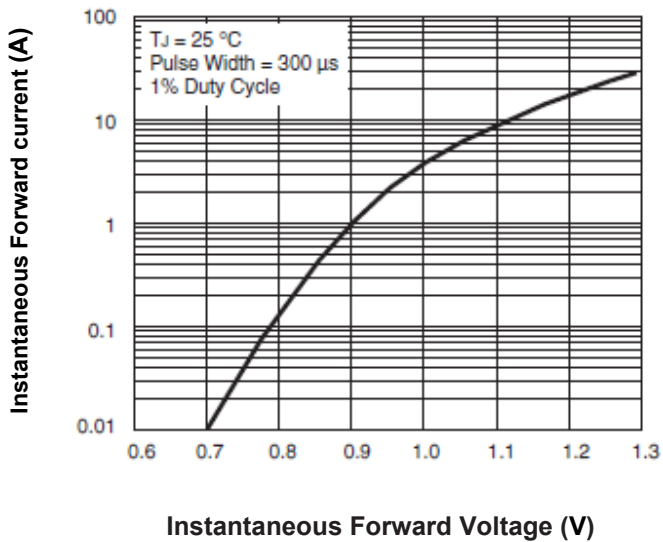


Fig.4- Typical Reverse Characteristics

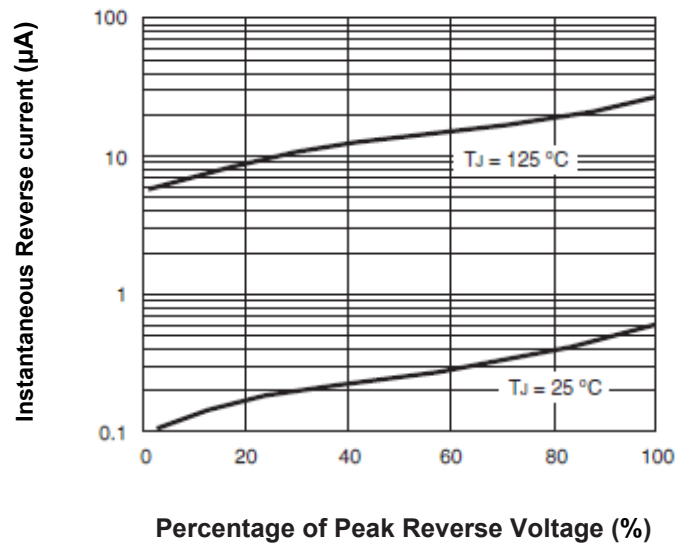
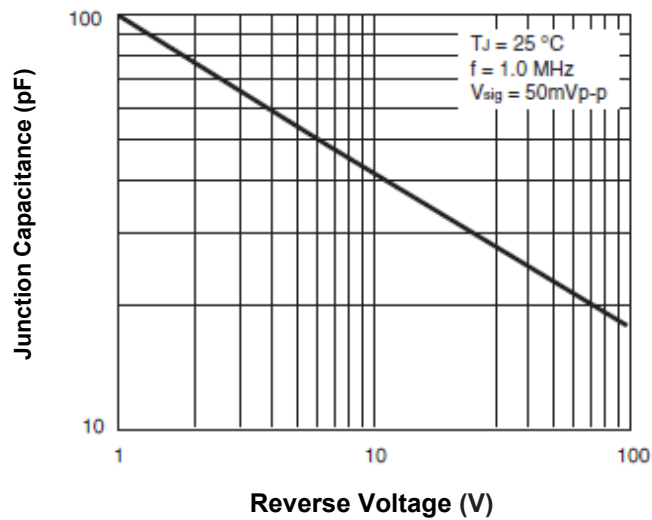


Fig.5- Junction Capacitance

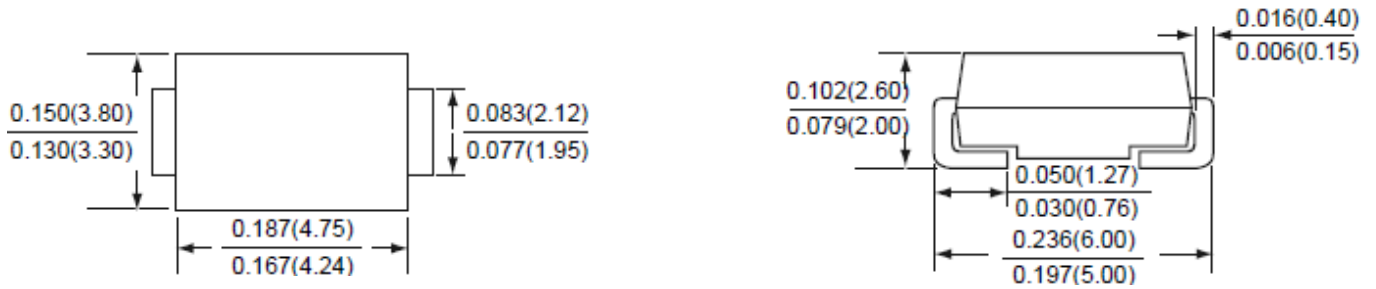


# 3.0A Surface Mount Rectifier

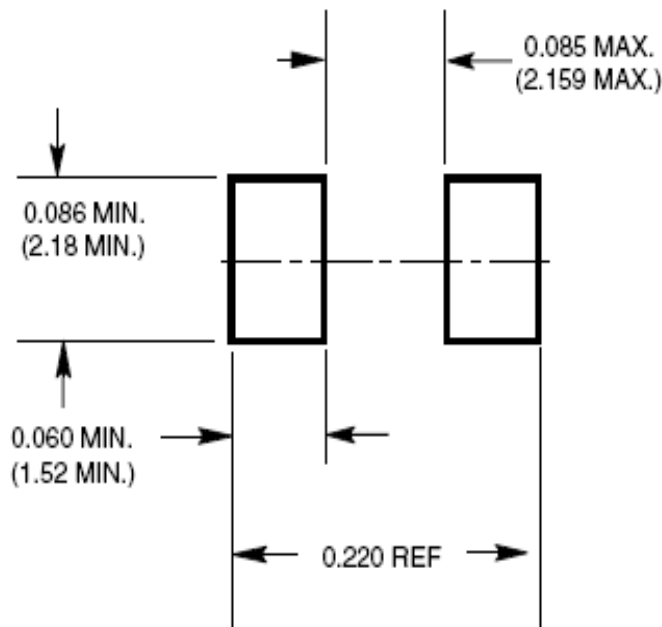
## S3AB - S3MB

### Dimensions in inch (mm)

#### SMB (DO214AA)



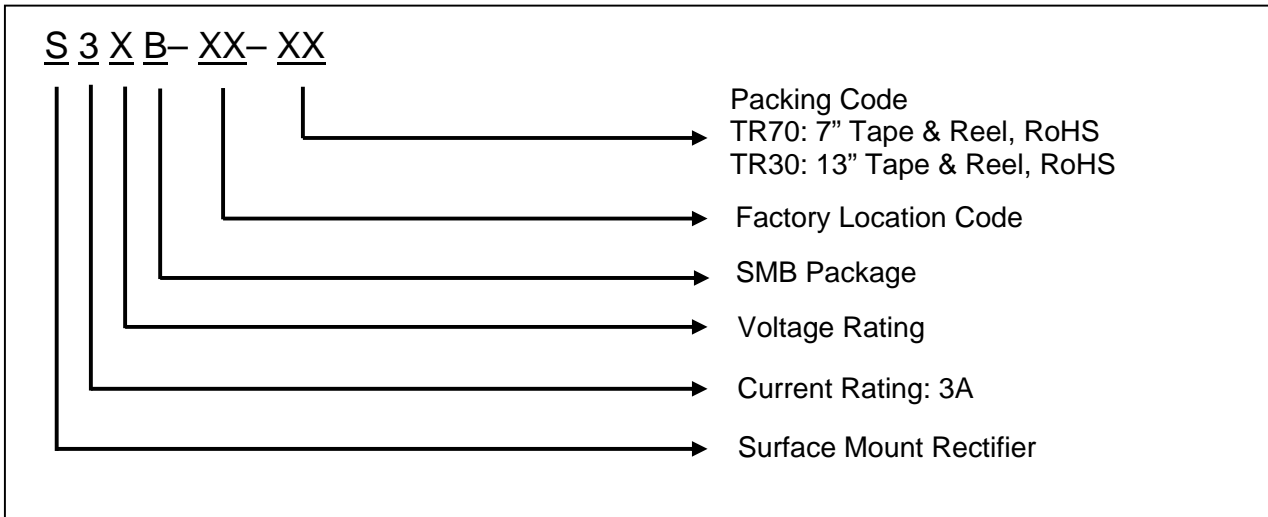
### Mounting Pad Layout in inches (mm)



## 3.0A Surface Mount Rectifier

### S3AB - S3MB

#### Ordering Information



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