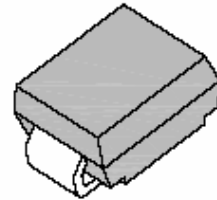


**3.0A Sintered Glass Passivated Super Fast Rectifier**

**Features**

- Sintered glass passivated (SGP) rectifier chip
- Glass passivated cavity-free junction
- Ideal for surface mount automotive applications
- Built-in strain relief
- Easy pick and place
- High temperature soldering guaranteed:250°C/10 seconds, at terminals
- RoHS Compliance



SMB



**Mechanical Data**

<b>Case:</b>	JEDEC DO-214AA(SMB) molded plastic over passivated chip
<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 cathode end
<b>Weight:</b>	0.003 ounce, 0.093 gram

**Maximum Ratings and Electrical Characteristics** ( $T_A=25^\circ\text{C}$  unless noted otherwise)

Symbol	Description	EGF3AB	EGF3BB	EGF3DB	EGF3GB	EGF3JB	EGF3KB	Unit	Conditions
<b>VRRM</b>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	V	
<b>VRMS</b>	Maximum RMS Voltage	35	70	140	280	420	560	V	
<b>VDC</b>	Maximum DC Blocking Voltage	50	100	200	400	600	800	V	
<b>IF(AV)</b>	Maximum Average Forward Rectified Current	3.0						A	TL=110° C
<b>IFSM</b>	Peak Forward Surge Current	115				105		A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

# 3.0A Sintered Glass Passivated Super Fast Rectifier

## EGF3AB - EGF3KB

Symbol	Description	EGF3AB	EGF3BB	EGF3DB	EGF3GB	EGF3JB	EGF3KB	Unit	Conditions
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	0.95			1.25	1.7	2.2	V	I <sub>F</sub> =3.0 A
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0						μA	TA=25° C
		120							TA=125° C
<b>T<sub>rr</sub></b>	Maximum Reverse Recovery Time	35						nS	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A
<b>C<sub>J</sub></b>	Typical Junction Capacitance	45						pF	V <sub>R</sub> =4V, f=1MHz
<b>R<sub>thJA</sub></b>	Typical Thermal Resistance	16						°C / W	Note
<b>T<sub>J</sub>, T<sub>stg</sub></b>	Operating junction and Storage Temperature Range	-55 to +175						°C	

**Note:** Thermal resistance from junction to ambient P.C.B mounted on 0.2x0.2" (5.0x5.0mm) copper pad areas.

### Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

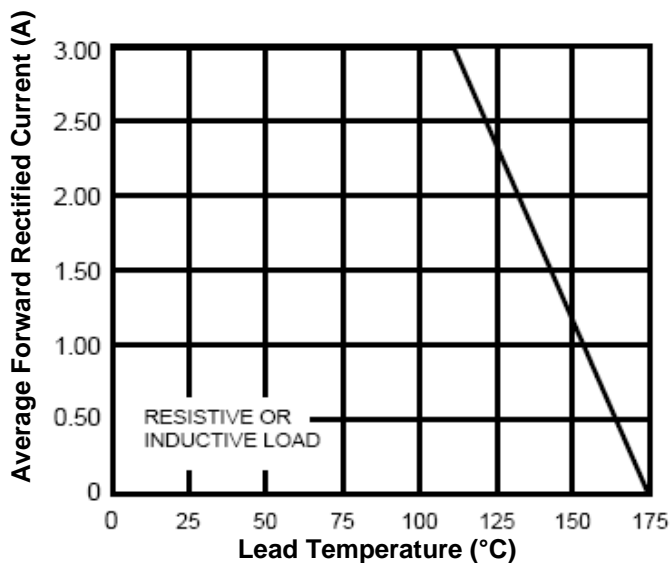
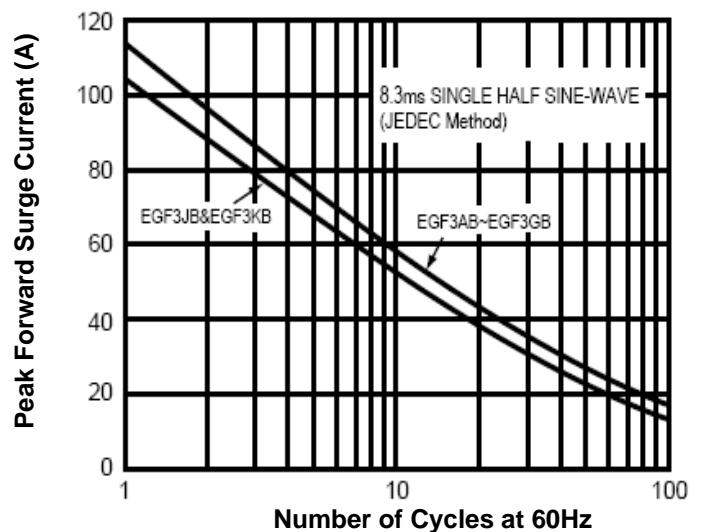


Fig.2- Max. Non-Repetitive Forward Surge Current



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## EGF3AB - EGF3KB

Fig.3- Typical Instantaneous Forward Characteristics

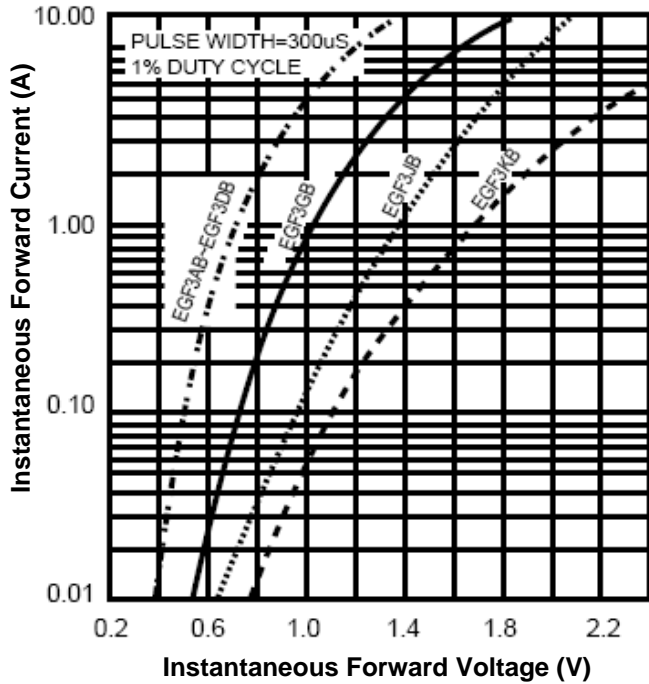


Fig.4-Typical Reverse Characteristics

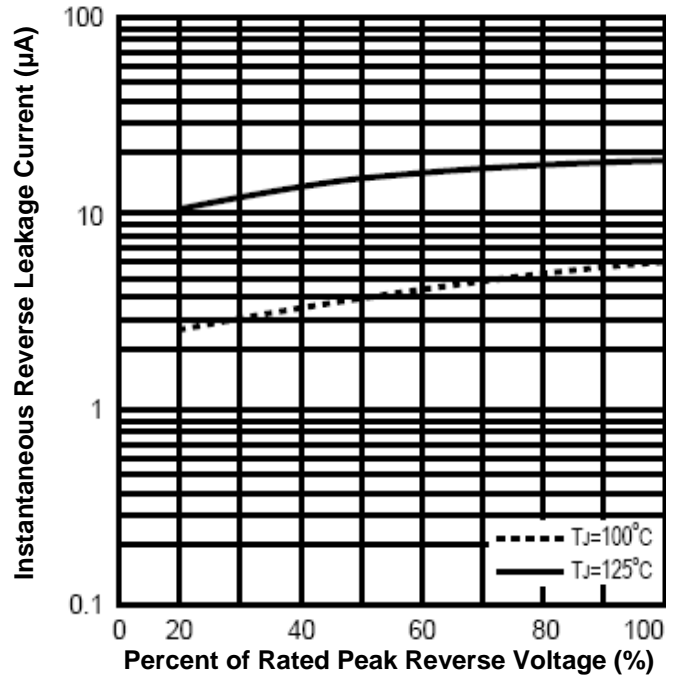
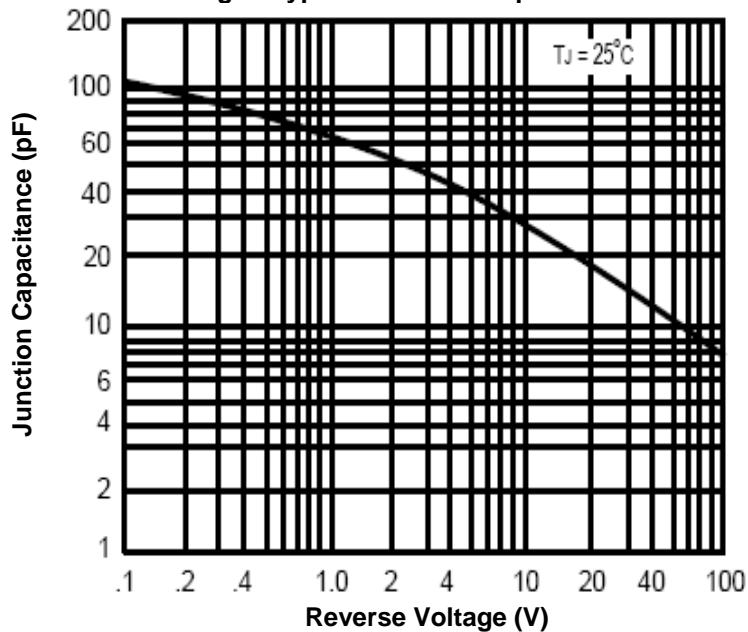


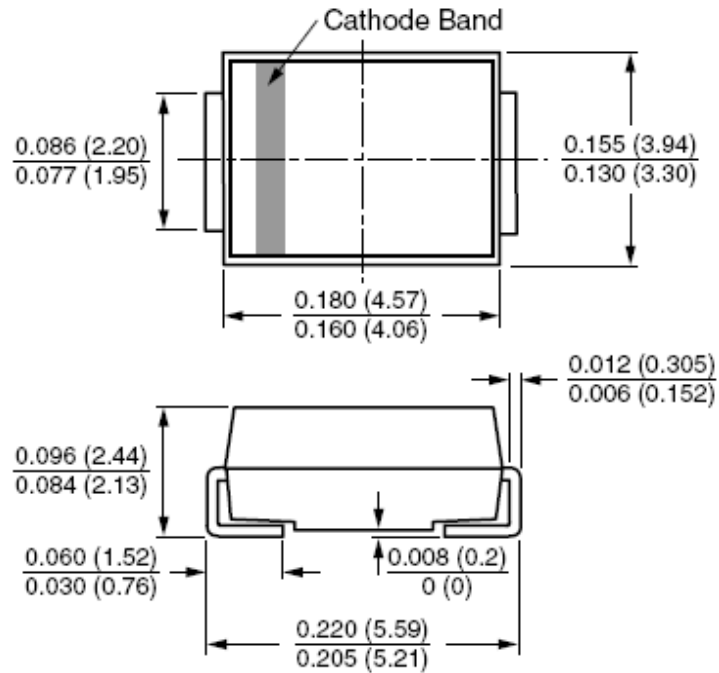
Fig.5- Typical Junction Capacitance



# 3.0A Sintered Glass Passivated Super Fast Rectifier

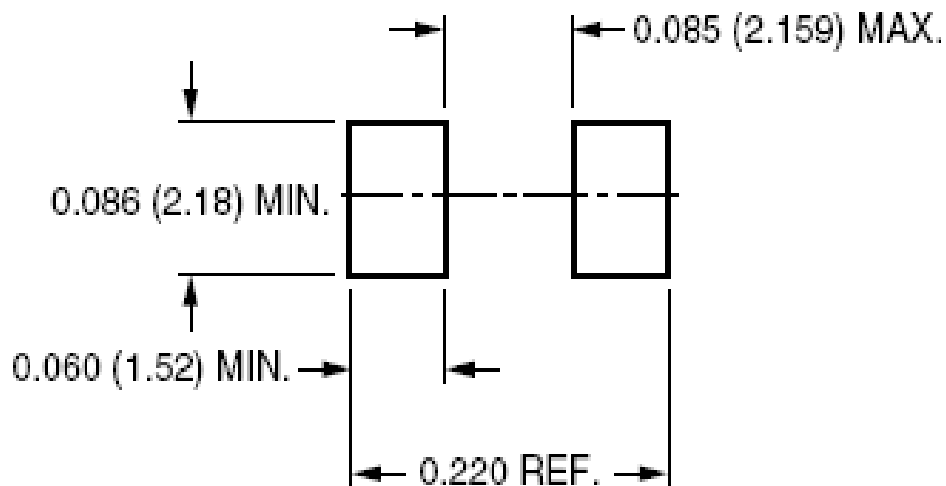
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## Dimensions in inch (mm)



SMB

## Mounting Pad Layout in inch (mm)



## 3.0A Sintered Glass Passivated Super Fast Rectifier

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EGF3AB - EGF3KB

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