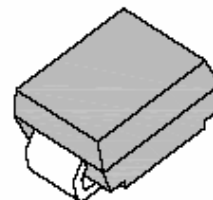


3.0A Sintered Glass Passivated Super Fast Rectifier (SGP[®])

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

Case:	JEDEC DO-214AA(SMB) molded plastic over passivated chip
Epoxy:	Plastic package has UL flammability classification 94V-0
Terminals:	Solder plated, solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode end
Weight:	0.003 ounce, 0.093 gram

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

Symbol	Description	EGF3AB	EGF3BB	EGF3DB	EGF3GB	EGF3JB	EGF3KB	Unit	Conditions
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	V	
V_{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	V	
V_{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	V	
I_{F(AV)}	Maximum Average Forward Rectified Current	3.0						A	TL=110° C
I_{FSM}	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 (SGP[®])

EGF3AB - EGF3KB

Symbol	Description	EGF3AB	EGF3BB	EGF3DB	EGF3GB	EGF3JB	EGF3KB	Unit	Conditions
V_F	Maximum Instantaneous Forward Voltage	0.95			1.25	1.7	2.2	V	I _F =3.0 A
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0						μA	TA=25° C
		120							TA=125° C
T_{rr}	Maximum Reverse Recovery Time	35						nS	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A
C_J	Typical Junction Capacitance	45						pF	V _R =4V, f=1MHz
R_{thJA}	Typical Thermal Resistance	16						°C / W	Note
T_J, T_{STG}	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

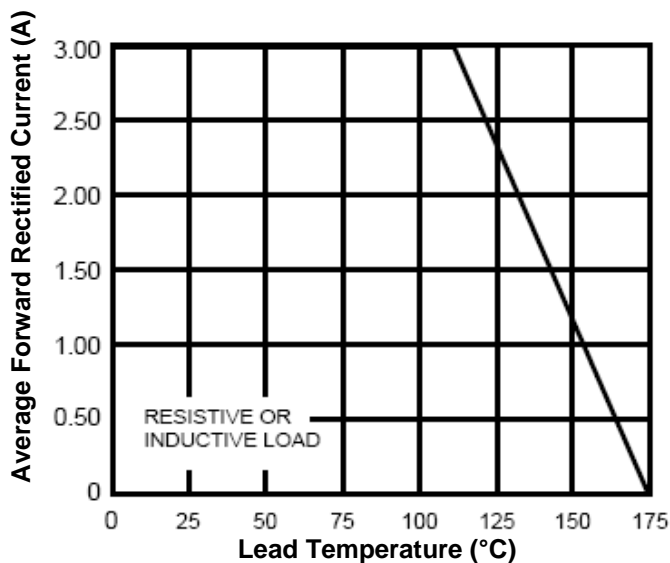
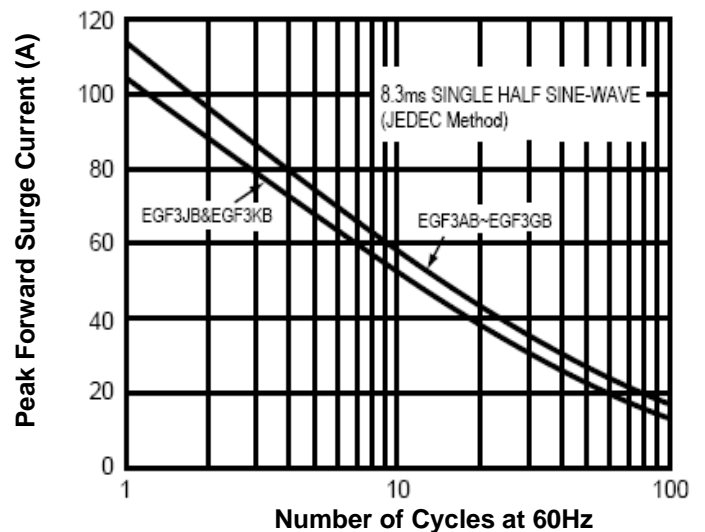


Fig.2-Max. Non-Repetitive Forward Surge Current



3.0A Sintered Glass Passivated Super Fast Rectifier (SGP[®])

EGF3AB - EGF3KB

Fig.3- Typical Instantaneous Forward Characteristics

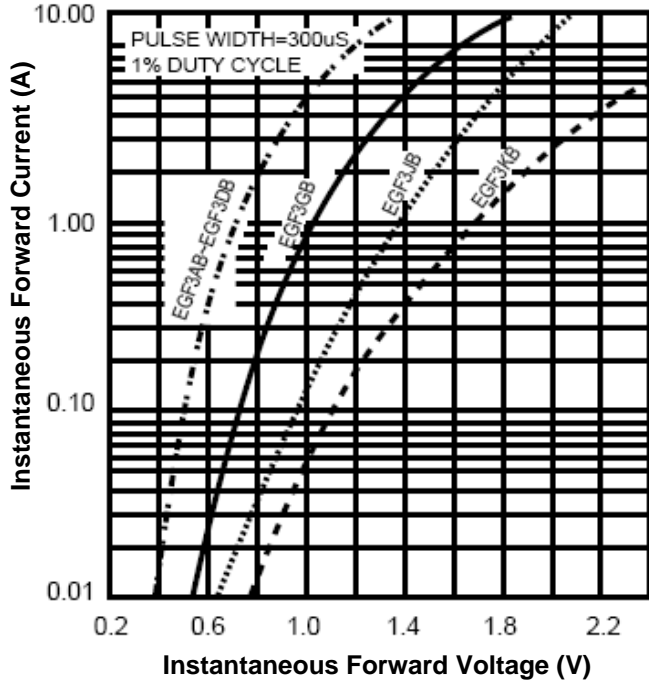


Fig.4-Typical Reverse Characteristics

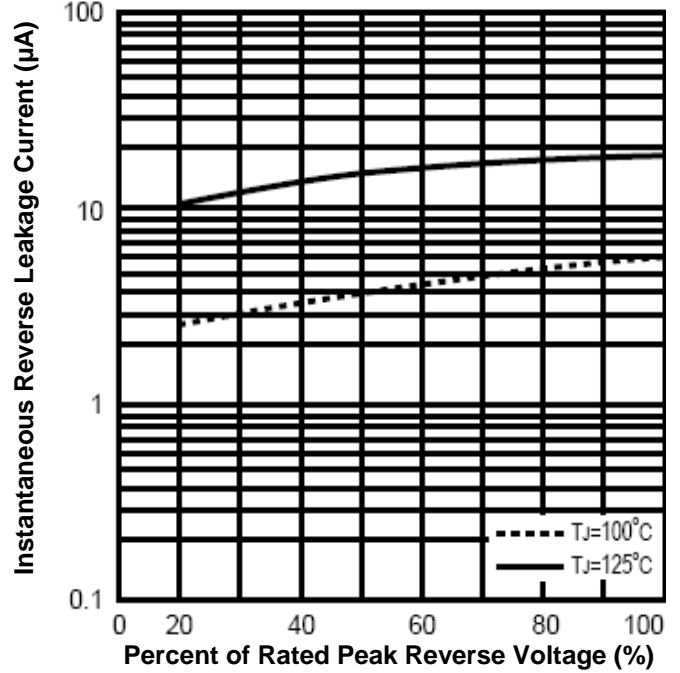
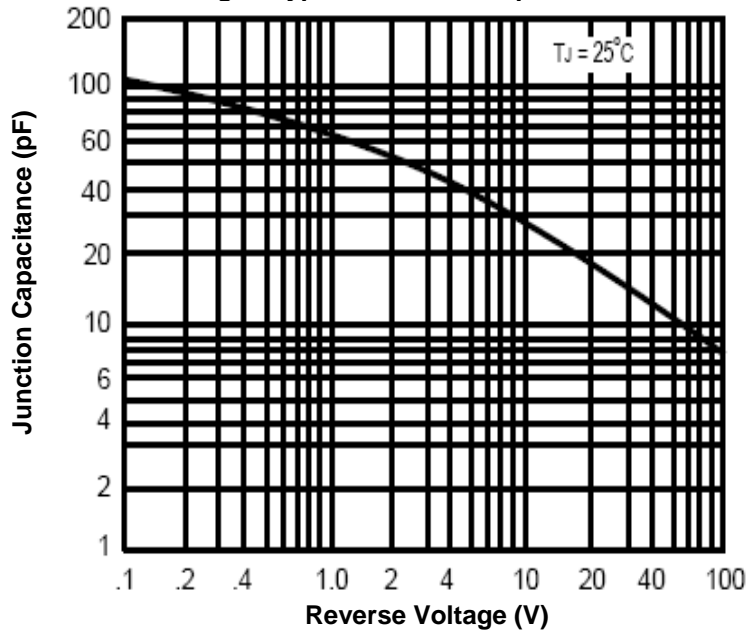


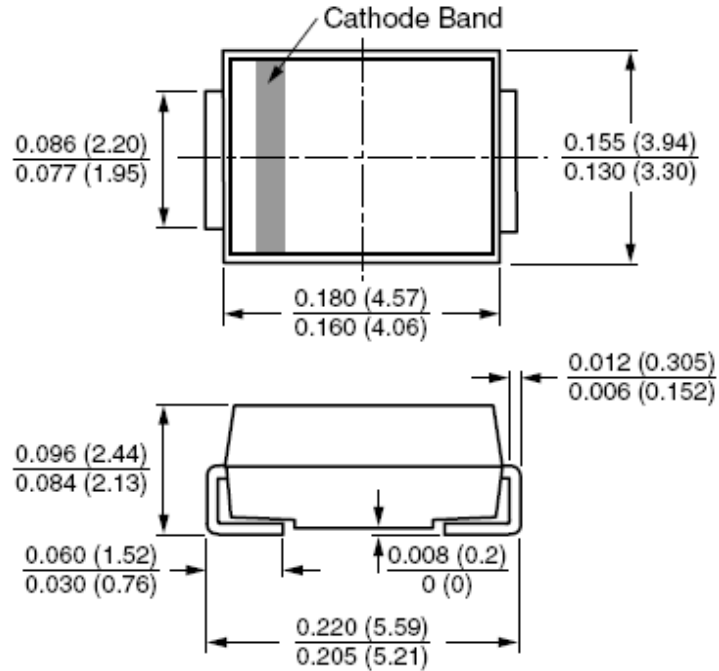
Fig.5- Typical Junction Capacitance



3.0A Sintered Glass Passivated Super Fast Rectifier (SGP[®])

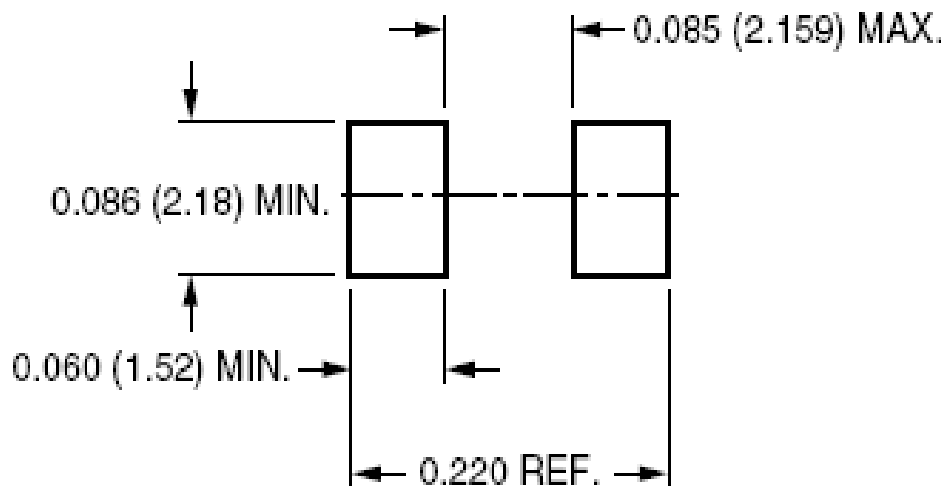
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Dimensions in inch (mm)



SMB

Mounting Pad Layout in inch (mm)



3.0A Sintered Glass Passivated Super Fast Rectifier (SGP®)

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