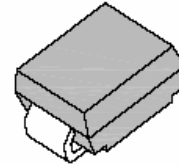


3.0A Sintered Glass Passivated Fast Recovery Rectifier (SGP[®])

Features

- Sintered glass passivated (SGP[®]) rectifier chip
- Fast switching for high efficiency
- Ideal for surface mount automated applications
- High temperature soldering guaranteed: 260°C/10 seconds, at terminals
- Plastic package has UL Flammability Classification 94V-0
- RoHS Compliance

SMB



Mechanical Data

Case:	JEDEC DO-214AA (SMB) molded plastic over passivated chip
Terminals:	Tin plated, solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode end
Mounting Position:	Any
Weight:	0.004 ounces, 0.12 gram

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

Symbol	Description	RGF 3AB	RGF 3BB	RGF 3DB	RGF 3GB	RGF 3JB	RGF 3JAB	RGF 3KB	RGF 3KAB	RGF 3MB	RGF 3MAB	Unit	Conditions
VRRM	Max. Repetitive Peak Reverse Voltage	50	100	200	400	600	600	800	800	1000	1000	V	
VRMS	Max. RMS Voltage	35	70	140	280	420	420	560	560	700	700	V	
VDC	Max. DC Blocking Voltage	50	100	200	400	600	600	800	800	1000	1000	V	
VF	Max. Forward Voltage	1.3										V	IF(AV)=3.0A
IF(AV)	Max. Average Forward Rectified Current	3.0										A	TL=100°C
IR(AV)	Max. Full Load Reverse Current	100										μA	TA=55°C
IFSM	Peak Forward Surge Current	115										A	Note 1
IR	Reverse Current @ VR = VRRM	5										μA	TA=25°C
		50											TA=125°C
		120											TA=150°C

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

RGF3AB - RGF3MAB

Symbol	Description	RGF 3AB	RGF 3BB	RGF 3DB	RGF 3GB	RGF 3JB	RGF 3JAB	RGF 3KB	RGF 3KAB	RGF 3MB	RGF 3MAB	Unit	Conditions
Trr	Max. Reverse Recovery Time	150				250	150	500	300	500	300	nS	IF=0.5A, IR=1.0A, Irr=0.25A.
RthJA	Typical Thermal Resistance	55										°C / W	Note 2
RthJL		15											
CJ	Typical Junction Capacitance	60										pF	VR=4V, f=1MHz
TJ,TSTG	Operating Junction and Storage Temperature Range	-65 to +175										° C	

- Note:** 1. 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
2. Thermal resistance from junction to ambient and from junction to lead P.C.B mounted on 0.2 × 0.2" (5.0 × 5.0mm) copper pad areas.

Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

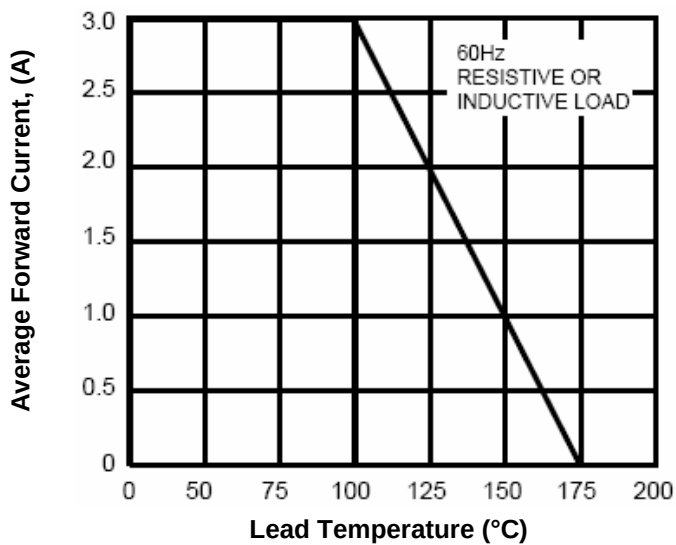
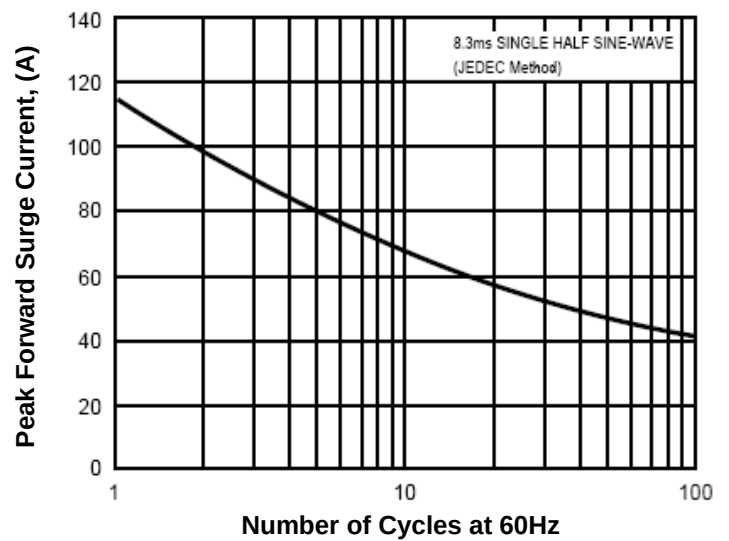


Fig.2- Maximum Non-Repetitive Forward Surge Current



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

RGF3AB - RGF3MAB

Fig.3- Typical Forward Characteristics

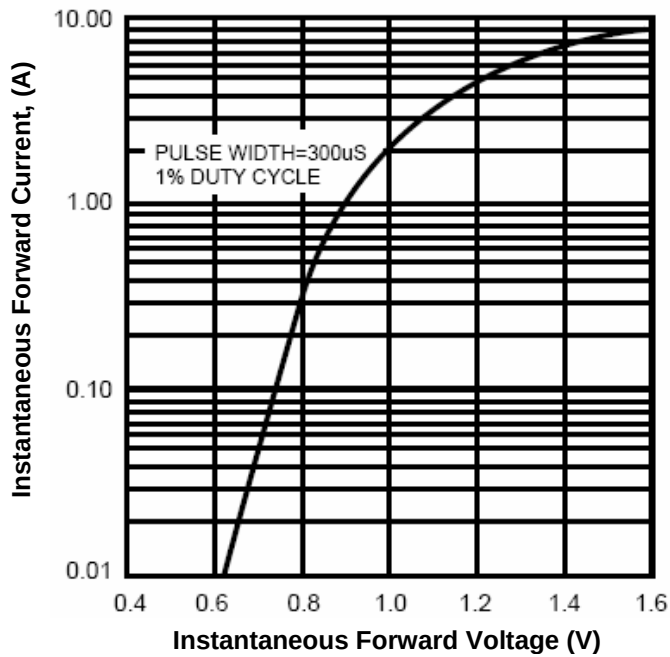


Fig.4-Typical Reverse Characteristics

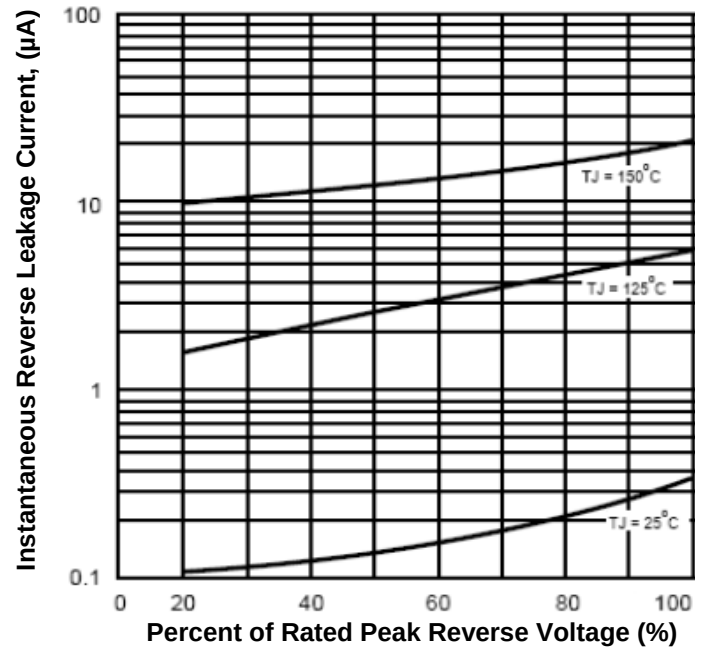
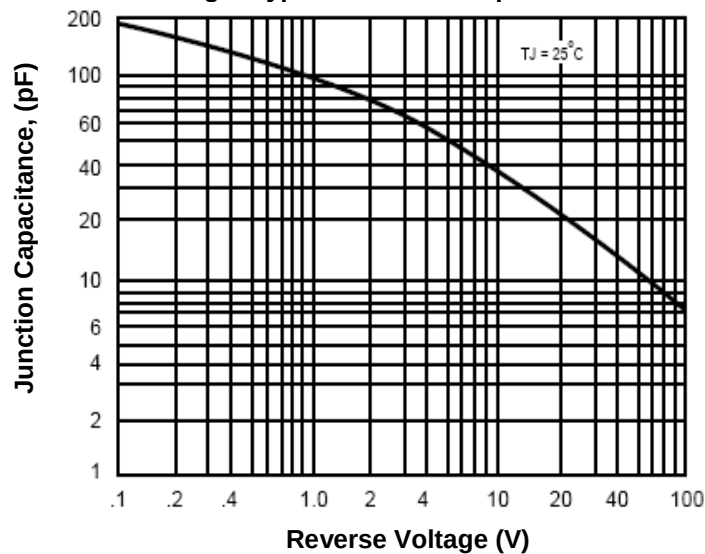


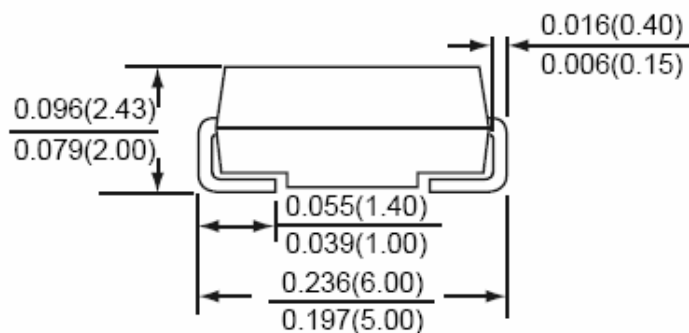
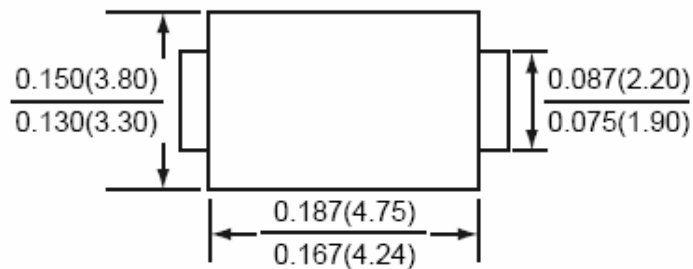
Fig.5-Typical Junction Capacitance



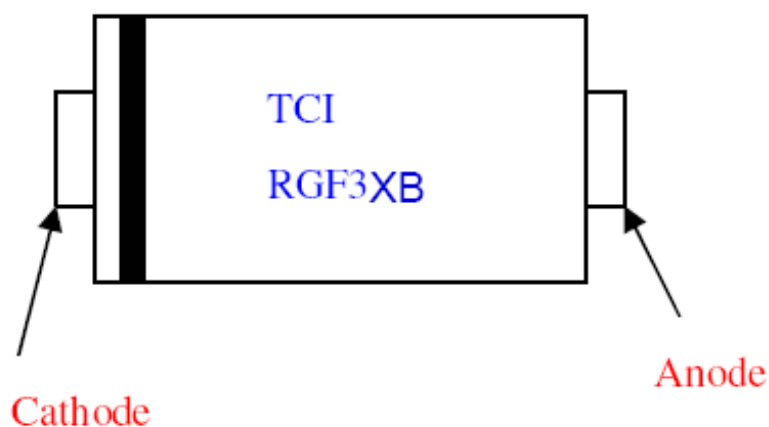
3.0A Sintered Glass Passivated Fast Recovery Rectifier (SGP®)

RGF3AB - RGF3MAB

Dimensions in inches (mm)



Marking Information:

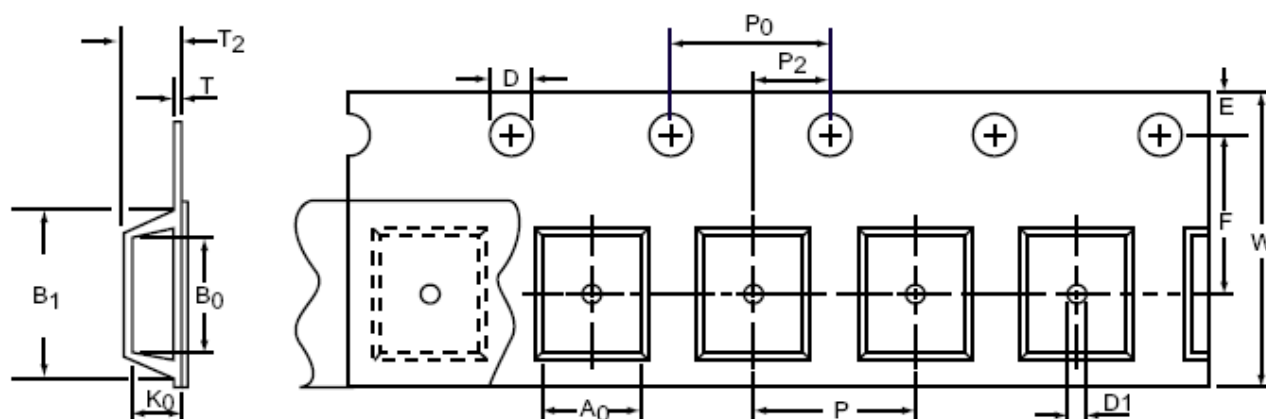


3.0A Sintered Glass Passivated Fast Recovery Rectifier (SGP®)

RGF3AB - RGF3MAB

Packing Information:

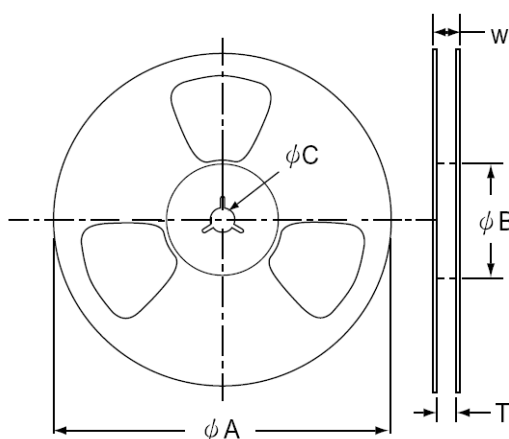
Carrier Tape Dimensions (in mm)



Components Outline	A0	B0	D	E	F	K0	B1
SMB	See note 1	See note 1	1.5±0.1	1.75±0.1	5.50±0.05	See note 1	8.20max.
	P	P0	P2	T max.	W	T2	D1
	8.00±0.10	4.0±0.10	2.0±0.1	0.40	12.00±3.00	2.67±0.10	1.5min.

NOTE : 1. A0 , B0 , and K0 are determined by component size. The clearance between the components and the cavity must be within 0.05 mm (0.002") Min. to 0.50 mm (0.02") Max. for 8 mm tape and 12 mm tape, 0.15 mm (0.066") Min. to 0.90 mm (0.035") Max.

Reel Dimensions (in mm)



A	B	C	w	T
330 ± 2.0(TR30)	50min.	13.0±0.5	18.7max.	14.4max.
178 ± 2.0(TR70)				

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

RGF3AB - RGF3MAB

Packing Quantity Information:

Quantity	PCS per Reel	PCS per Inner Box	PCS per Carton
-TR70 Tape & Reel	750	3000	18000
- TR30 Tape & Reel	3200	6400	32000

Carton Size Information:

Carton Size (TR70)	Carton Size (TR30)
400X207X240(in mm)	360X360X240(in mm)

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