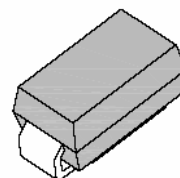


## 1.0A Sintered Glass Passivated Fast Recovery Rectifier

### Features

- 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

SMA



### Mechanical Data

<b>Case:</b>	JEDEC DO-214AC(SMA) molded plastic over passivated chip
<b>Terminals:</b>	Tin plated, solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes cathode end
<b>Mounting Position:</b>	Any
<b>Weight:</b>	0.002 ounces, 0.064 gram

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

Symbol	Description	RGF 1A	RGF 1B	RGF 1D	RGF 1G	RGF 1J	RGF 1JA	RGF 1K	RGF 1KA	RGF 1M	RGF 1MA	Unit	Conditions
<b>VRRM</b>	Max. Repetitive Peak Reverse Voltage	50	100	200	400	600	600	800	800	1000	1000	V	
<b>VRMS</b>	Max. RMS Voltage	35	70	140	280	420	420	560	560	700	700	V	
<b>VDC</b>	Max. DC Blocking Voltage	50	100	200	400	600	600	800	800	1000	1000	V	
<b>VF</b>	Max. Forward Voltage	1.3										V	$I_{F(AV)}=1.0\text{A}$
<b>IF(AV)</b>	Max. Average Forward Rectified Current	1.0										A	$T_L=100^\circ\text{C}$
<b>IR(AV)</b>	Max. Full Load Reverse Current	100										$\mu\text{A}$	$T_A=55^\circ\text{C}$
<b>IFSM</b>	Peak Forward Surge Current	30										A	Note 1
<b>IR</b>	Reverse Current @ $V_R = V_{RRM}$	5										$\mu\text{A}$	$T_A=25^\circ\text{C}$
		30											$T_A=125^\circ\text{C}$
		50											$T_A=150^\circ\text{C}$
<b>Trr</b>	Max. Reverse Recovery Time	150				250	150	500	300	500	300	nS	$I_F=0.5\text{A}$ , $I_R=1.0\text{A}$ , $I_{rr}=0.25\text{A}$ .

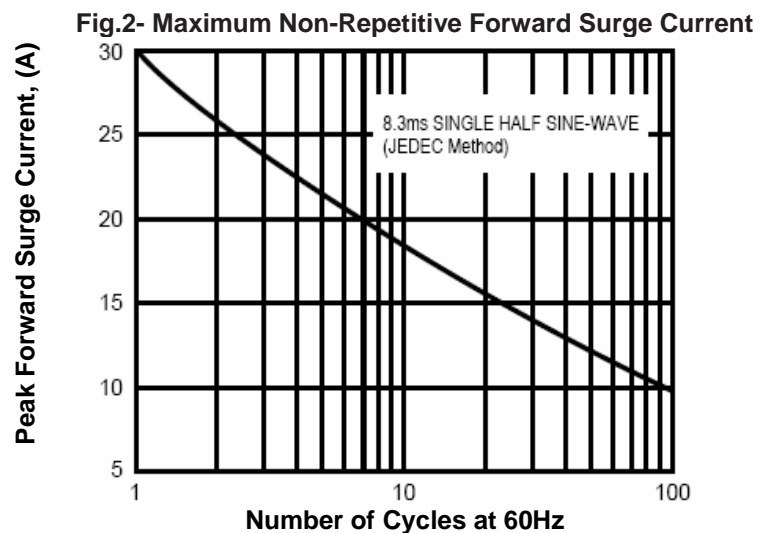
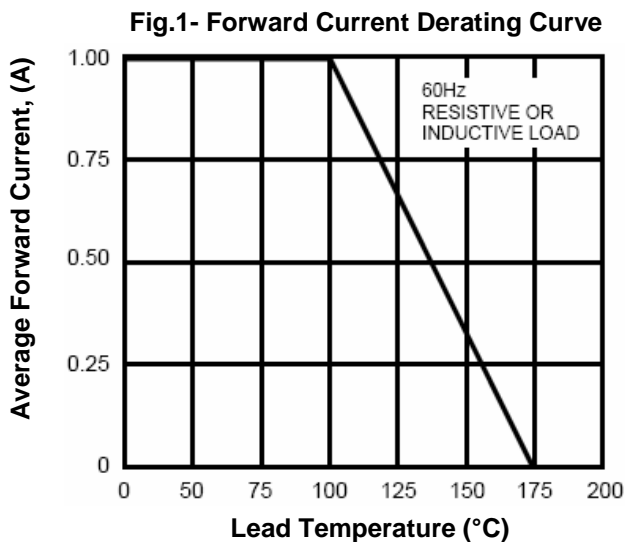
# 1.0A Sintered Glass Passivated Fast Recovery Rectifier

## RGF1A - RGF1MA

Symbol	Description	RGF 1A	RGF 1B	RGF 1D	RGF 1G	RGF 1J	RGF 1JA	RGF 1K	RGF 1KA	RGF 1M	RGF 1MA	Unit	Conditions
RthJA	Typical Thermal Resistance	105										°C / W	Note 2
RthJL		32											
CJ	Typical Junction Capacitance	15										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 x 0.2" (5.0 x 5.0mm) copper pad areas.

### Typical Characteristics Curves



# 1.0A Sintered Glass Passivated Fast Recovery Rectifier

## RGF1A - RGF1MA

Fig.3- Typical Forward Characteristics

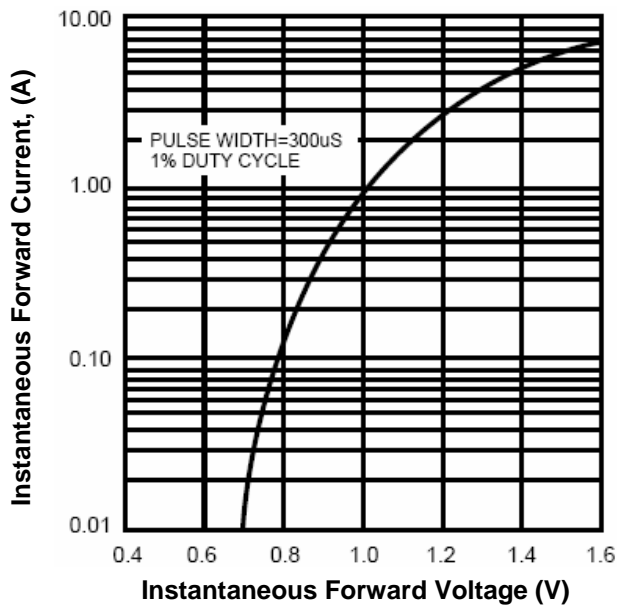


Fig.4-Typical Reverse Characteristics

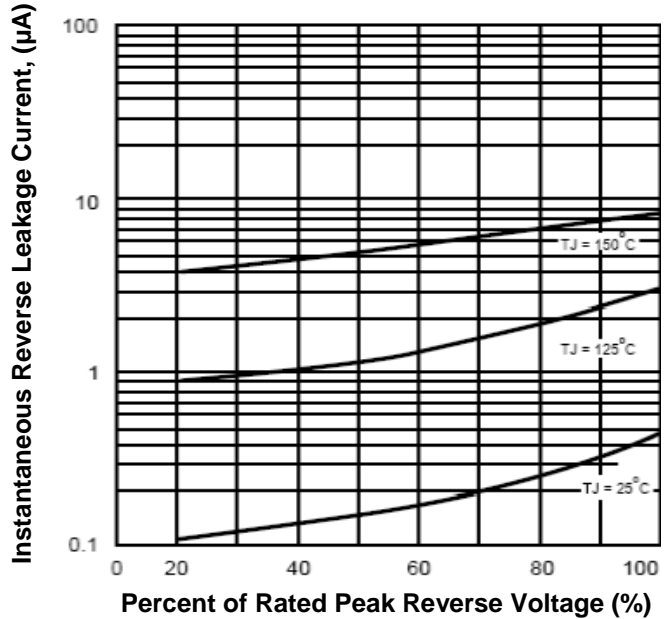


Fig.5-Typical Junction Capacitance

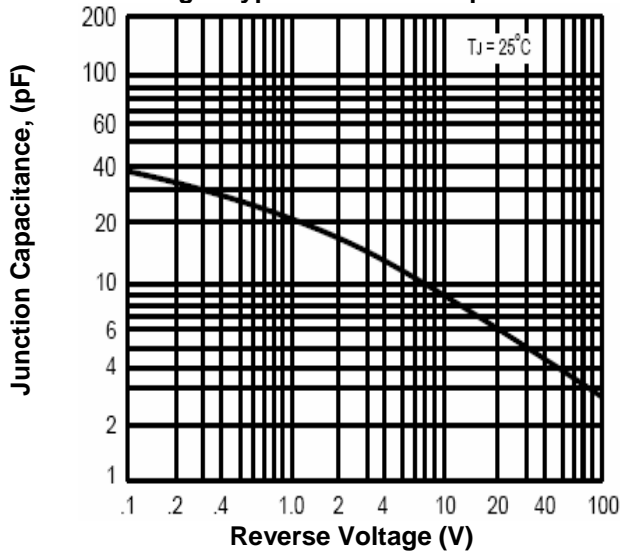
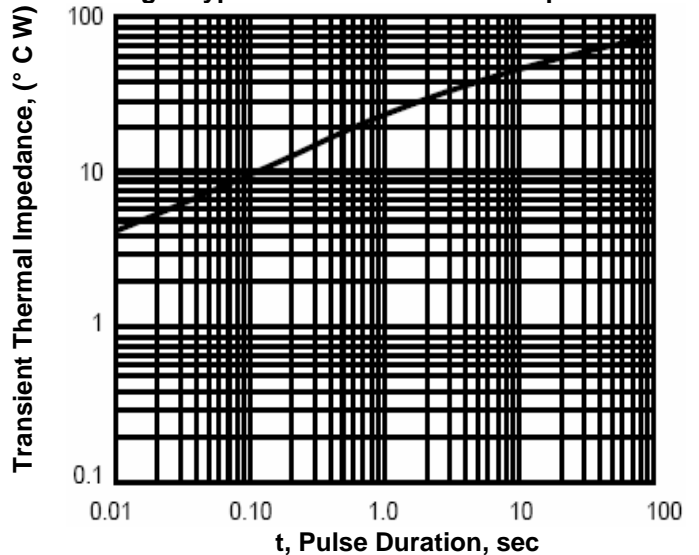


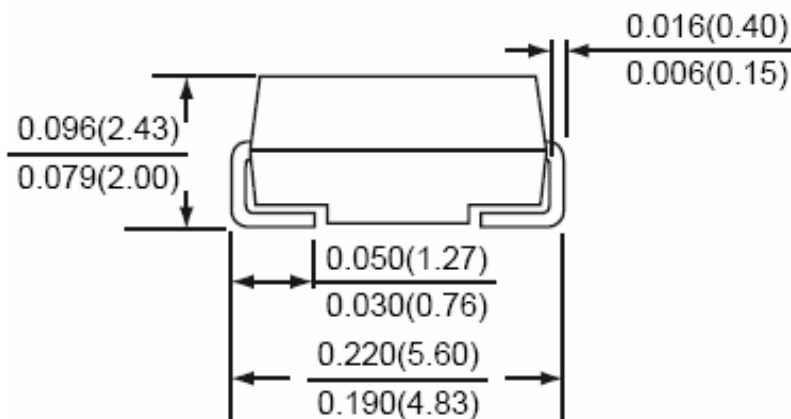
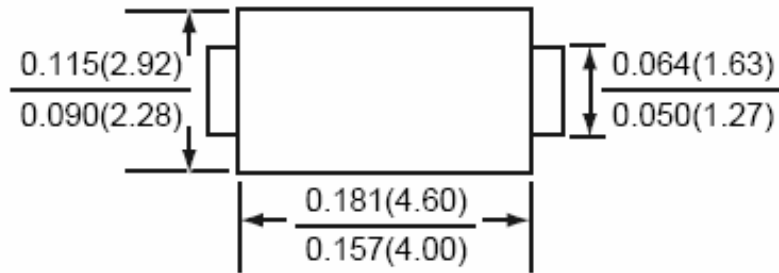
Fig.6-Typical Transient Thermal Impedance



# 1.0A Sintered Glass Passivated Fast Recovery Rectifier

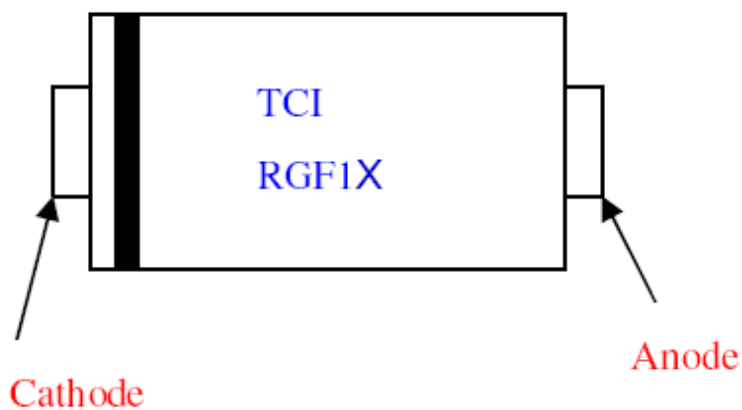
RGF1A - RGF1MA

Dimensions in inches (mm)



SMA (DO-214AC)

Marking Information:

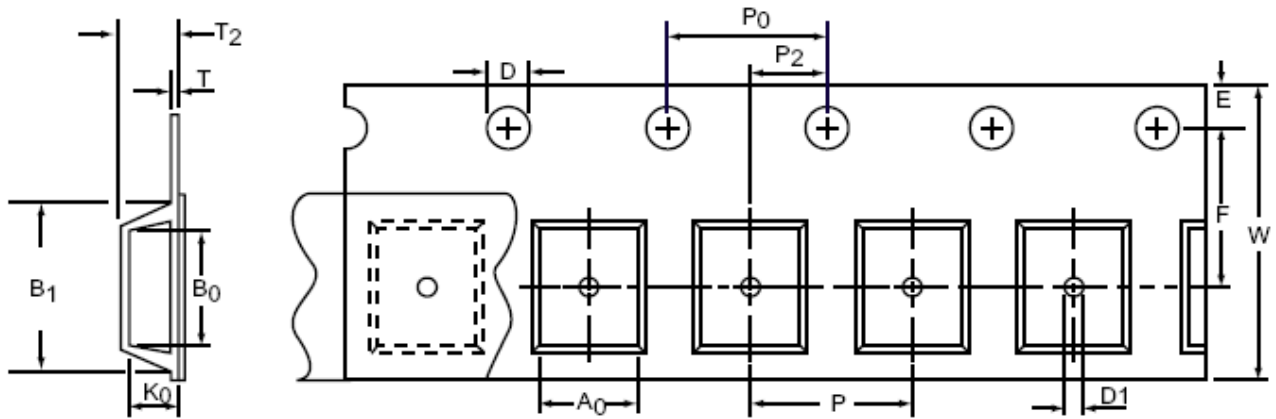


# 1.0A Sintered Glass Passivated Fast Recovery Rectifier

## RGF1A - RGF1MA

### Packing Information:

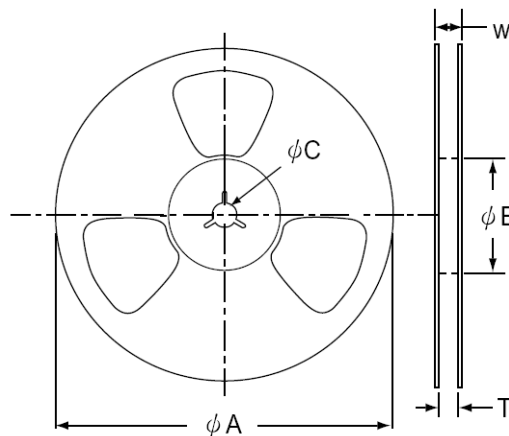
#### Carrier Tape Dimensions (in mm)



Components Outline	A0	B0	D	E	F	K0	B1
SMA	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
	4.00±0.10	4.0±0.10	2.0±0.1	0.40	12.00±3.00	2.54±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)				

# 1.0A Sintered Glass Passivated Fast Recovery Rectifier

## RGF1A - RGF1MA

### Packing Quantity Information:

Quantity	PCS per Reel	PCS per Inner Box	PCS per Carton
-TR70 Tape & Reel	1500	6000	36000
- TR30 Tape & Reel	6500	13000	65000

### Carton Size Information:

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

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