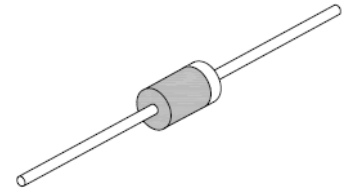


## 3.0A Sintered Glass Passivated Rectifier (SGP<sup>®</sup>)

### Features

- Sintered glass passivated (SGP<sup>®</sup>) rectifier chip
- Capable of meeting environmental standards of MIL-S-19500
- 3.0A operation at  $T_A=55^\circ\text{C}$  with no thermal runaway
- High temperature soldering guaranteed:  $260^\circ\text{C}/10$  seconds  
/.0375" (9.5mm) lead length, 5lbs (2.3kg) tension
- RoHS Compliance



DO-201AD



### Mechanical Data

<b>Case:</b>	JEDEC DO-201AD molded plastic body
<b>Epoxy:</b>	Plastic package has UL flammability classification 94V-0
<b>Terminals:</b>	Plated axial leads, solderable per MIL-STD-750, Method 2026
<b>Polarity:</b>	Color band denotes cathode end
<b>Weight:</b>	0.04 ounces, 1.12 grams

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

Symbol	Description	GP30A	GP30B	GP30D	GP30G	GP30J	GP30K	GP30M	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	3.0							A	0.375" (9.5mm) lead length(Fig.1)
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current	125							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

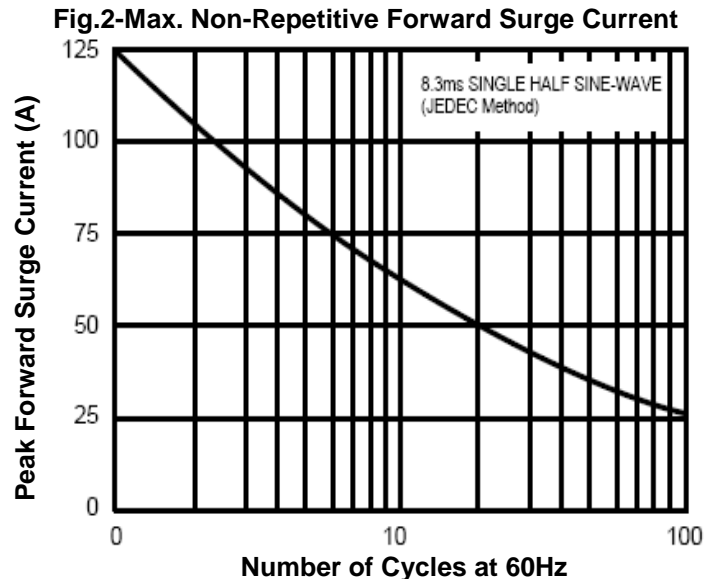
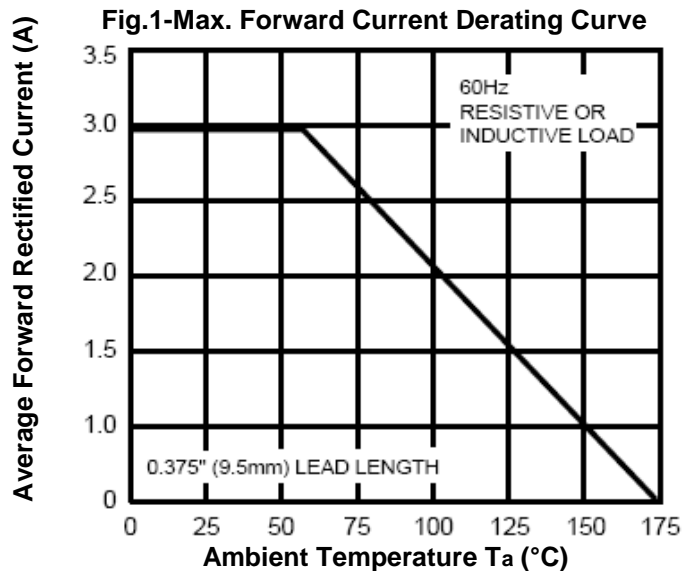
# 3.0A Sintered Glass Passivated Rectifier (SGP<sup>®</sup>)

## GP30A - GP30M

Symbol	Description	GP30A	GP30B	GP30D	GP30G	GP30J	GP30K	GP30M	Unit	Conditions
<b>V<sub>F</sub></b>	Maximum Instantaneous Forward Voltage	1.0							V	IF=3.0 A
<b>I<sub>R</sub></b>	Maximum DC Reverse Current at Rated DC Blocking Voltage	5							μA	TA=25° C
		50								TA=125° C
		100								TA=150° C
<b>C<sub>J</sub></b>	Typical Junction Capacitance	40							pF	VR=4V, f=1MHz
<b>R<sub>thJA</sub></b> <b>R<sub>thJL</sub></b>	Typical Thermal Resistance	20 10							°C / W	Note
<b>T<sub>J</sub>, T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-65 to +175							°C	

**Note:** Thermal resistance from junction to ambient at 0.375" (9.5mm) lead lengths, P.C.B mounted.

### Typical Characteristics Curves



# 3.0A Sintered Glass Passivated Rectifier (SGP<sup>®</sup>)

## GP30A - GP30M

Fig.3- Typical Forward Characteristics

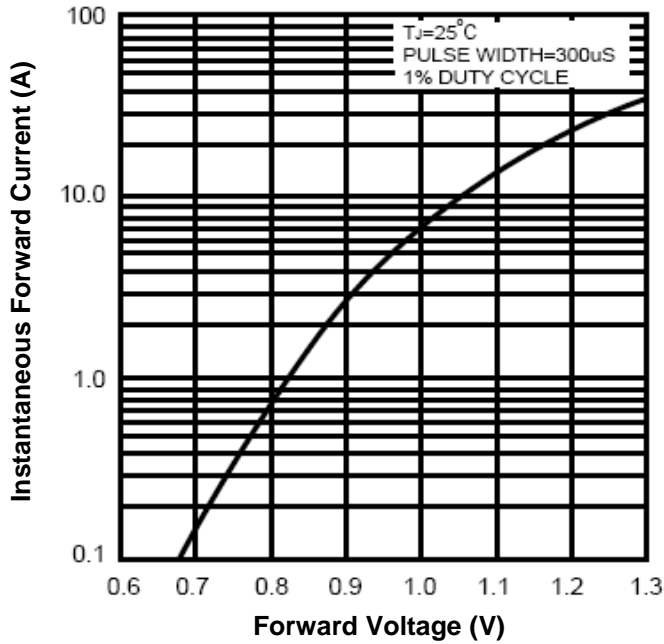


Fig.4-Typical Reverse Characteristics

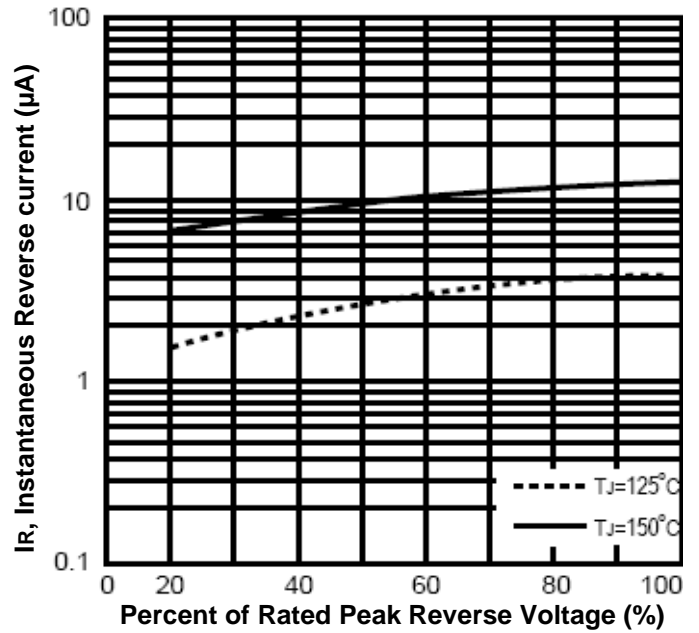
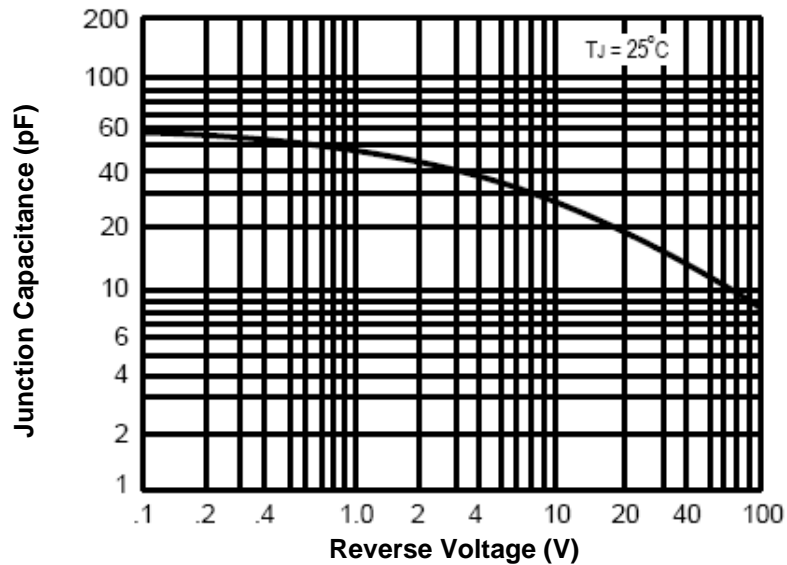


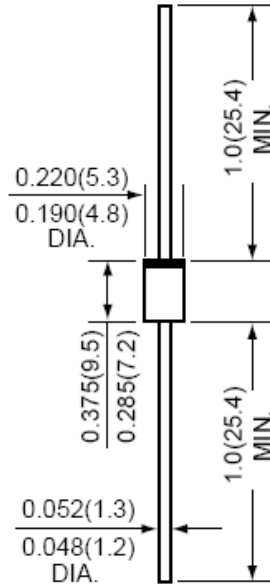
Fig.5- Typical Junction Capacitance



# 3.0A Sintered Glass Passivated Rectifier (SGP<sup>®</sup>)

GP30A – GP30M

Dimensions in inches (mm)



DO-201AD

## How to contact us

### USA HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800)-TAITRON (800)-824-8766 (661)-257-6060

Fax: (800)-TAITFAX (800)-824-8329 (661)-257-6415

Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)

Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

### TAITRON COMPONENTS INCORPORATED TAIWAN BRANCH

6F., NO.190, SEC. 2, ZHONGXING RD., XINDIAN DIST., NEW TAIPEI CITY 23146, TAIWAN R.O.C.

Tel: 886-2-2913-6238

Fax: 886-2-2913-6239

### TAITRON COMPONENT TECHNOLOG SHANGHAI CORPORATION

SUITE 1503, METROBANK PLAZA, 1160 WEST YAN'AN ROAD, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-2302-5027