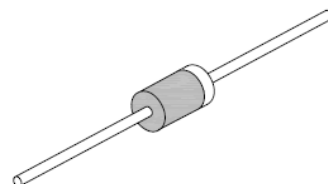


3.0A Sintered Glass Passivated Fast Recovery Rectifier

Features

- Sintered glass passivated (SGP) rectifier chip
- Capable of meeting environmental standards of MIL-S-19500
- For use in high frequency rectifier circuits
- Fast switching for high efficiency
- Typical IR less than 0.1uA
- High temperature soldering guaranteed 260°C/10 seconds
.0375" (9.5mm) lead length, 5lbs (2.3kg) tension
- RoHS Compliance



DO-201AD



Mechanical Data

| | |
|-------------------|---|
| Case: | JEDEC DO-201AD molded plastic body |
| Epoxy: | Plastic package has UL flammability classification 94V-0 |
| Terminals: | Plated axial leads, solderable per MIL-STD-750, Method 2026 |
| Polarity: | Color band denotes cathode end |
| Weight: | 0.004 ounces, 1.12 grams |

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

| Symbol | Description | RGP 30A | RGP 30B | RGP 30D | RGP 30G | RGP 30J | RGP 30K | RGP 30M | Unit | Conditions |
|--------------------------|---|---------|---------|---------|---------|---------|---------|---------|------|---|
| V_{RRM} | Maximum Repetitive Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| V_{RMS} | Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| V_{DC} | Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| I_{F(AV)} | Maximum Average Forward Rectified Current | 3.0 | | | | | | | A | 0.375" (9.5mm) lead length(Fig.1) |
| I_{FSM} | Peak Forward Surge Current | 125 | | | | | | | A | 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) |

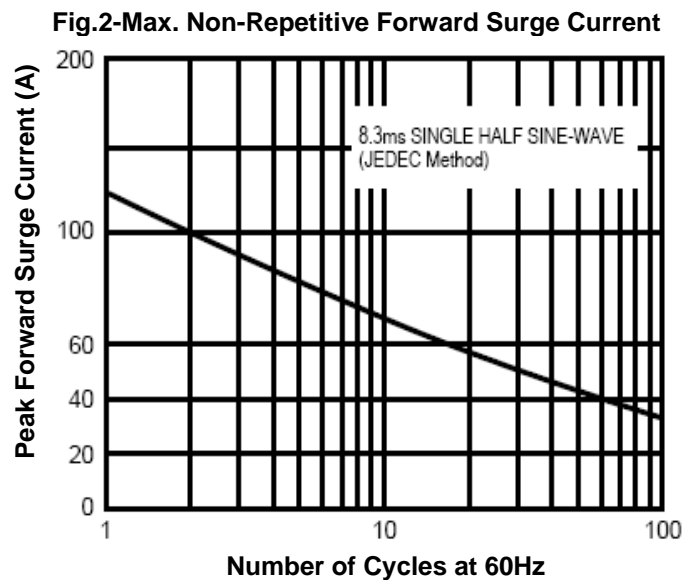
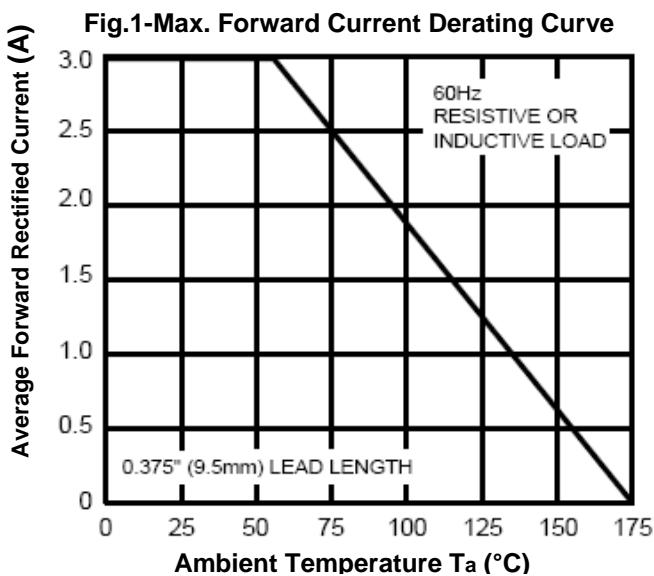
3.0A Sintered Glass Passivated Fast Recovery Rectifier

RGP30A – RGP30M

| Symbol | Description | RGP 30A | RGP 30B | RGP 30D | RGP 30G | RGP 30J | RGP 30K | RGP 30M | Unit | Conditions |
|-------------------------|---|-------------|---------|---------|---------|---------|---------|---------|--------|---------------------------|
| V_F | Maximum Instantaneous Forward Voltage | 1.3 | | | | | | | V | IF=3.0A |
| I_R | Maximum DC Reverse Current at Rated DC Blocking Voltage | 5 | | | | | | | μA | TA=25° C |
| | | 50 | | | | | | | | TA=125° C |
| | | 120 | | | | | | | | TA=150° C |
| T_{rr} | Typical Reverse Recovery Time | 150 | | | 250 | | 500 | | nS | IF=0.5A, IR=1A, Irr=0.25A |
| C_J | Typical Junction Capacitance | 60 | | | | | | | pF | VR=4V, f=1MHz |
| R_{thJA} | Typical Thermal Resistance | 20 | | | | | | | °C / W | Note |
| T_J | Operating Temperature range | -65 to +175 | | | | | | | °C | |
| T_{stg} | Storage Temperature Range | -65 to +175 | | | | | | | | |

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 Fast Recovery Rectifier

RGP30A - RGP30M

Fig.3- Typical Forward Characteristics

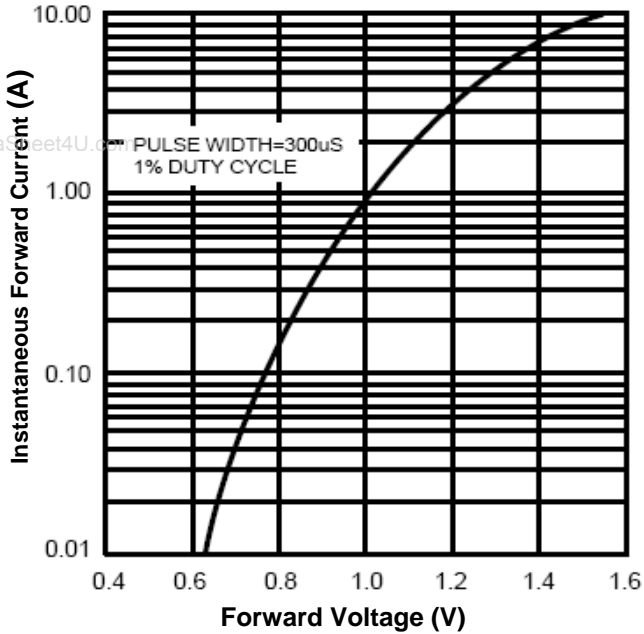


Fig.4-Typical Reverse Characteristics

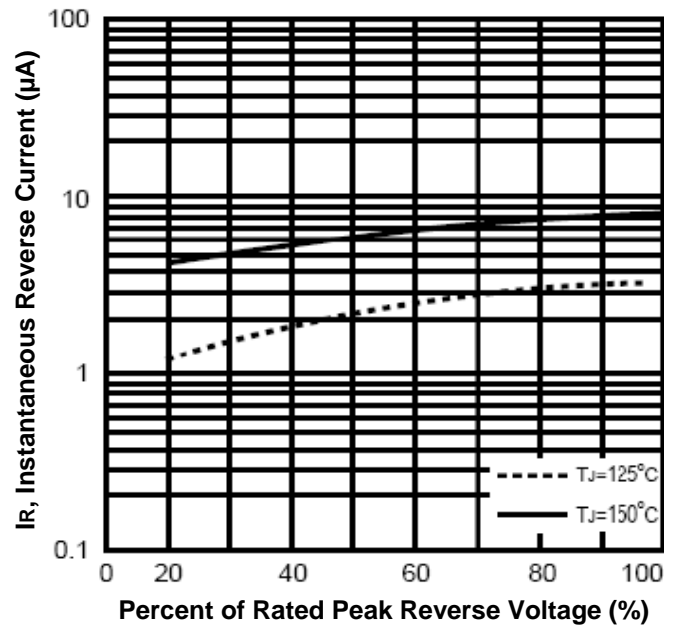
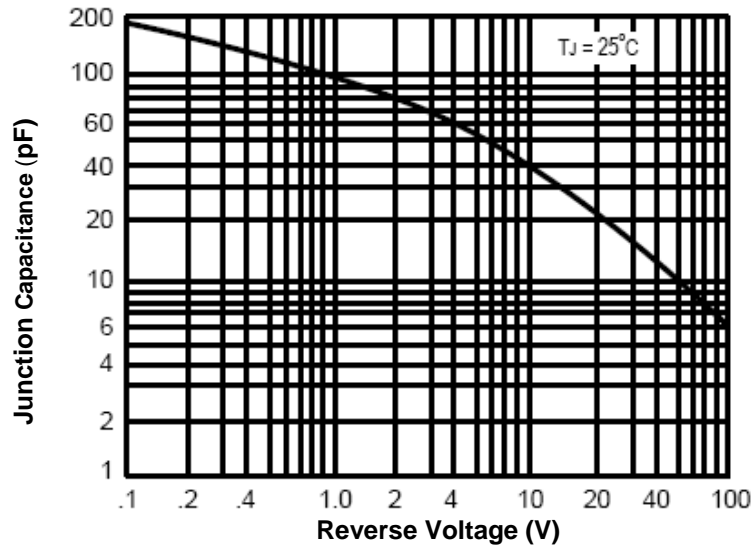


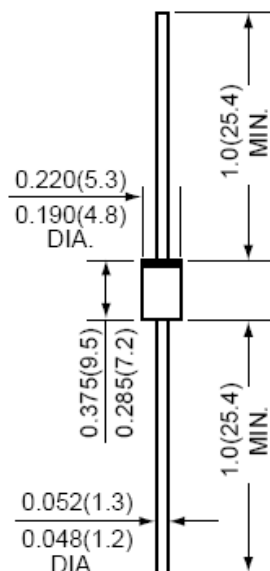
Fig.5- Typical Junction Capacitance



3.0A Sintered Glass Passivated Fast Recovery Rectifier

RGP30A - RGP30M

Dimensions in inches (mm)



DO-201AD

How to contact us:

US 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

Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.

42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

TAITRON COMPONETS INCORPORATED E REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

TAITRON COMPONETS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

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

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931