# **GPP1A THRU GPP1M**

## GLASS PASSIVATED JUNCTION RECTIFIER

VOLTAGE: 50 TO 1000V

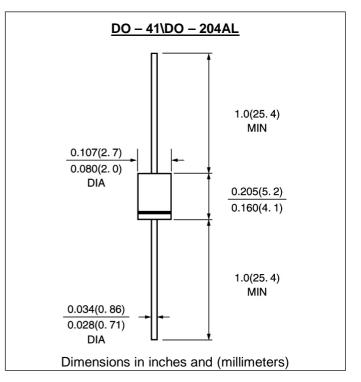
CURRENT: 1.0A

### FEATURE

Molded case feature for auto insertion High current capability Low leakage current High surge capability High temperature soldering guaranteed 250°C /10sec/0.375" lead length at 5 lbs tension Glass Passivated chip

#### **MECHANICAL DATA**

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy Polarity: color band denotes cathode Mounting position: any



GULF SBMI

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

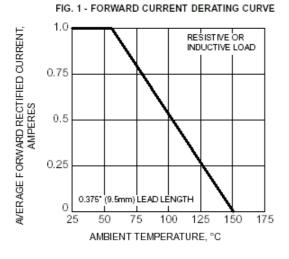
|  | SYMBOL   | GPP<br>1A   | GPP<br>1B | GPP<br>1D | GPP<br>1G | GPP<br>1J | GPP<br>1K | GPP<br>1M | units |
|--|----------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| Maximum Recurrent Peak Reverse Voltage   | Vrrm     | 50          | 100       | 200       | 400       | 600       | 800       | 1000      | V     |
| Maximum RMS Voltage  | Vrms     | 35          | 70        | 140       | 280       | 420       | 560       | 700       | V     |
| Maximum DC blocking Voltage  | Vdc      | 50          | 100       | 200       | 400       | 600       | 800       | 1000      | V     |
| Maximum Average Forward Rectified<br>Current 3/8" lead length at Ta =75℃             | lf(av)   | 1.0         |           |           |           |           |           | A         |       |
| Peak Forward Surge Current 8.3ms single<br>Half sine-wave superimposed on rated load | lfsm     | 30.0        |           |           |           |           |           |           | A     |
| Maximum Instantaneous Forward Voltage at<br>rated forward current                    | Vf       | 1.1         |           |           |           |           |           | V         |       |
| Maximum full load reverse current<br>full cycle at T <sub>L</sub> =75℃               | lr(av)   | 30.0        |           |           |           |           |           | μA        |       |
| Maximum DC Reverse CurrentTa =25℃at rated DC blocking voltageTa =100℃                | lr       | 5.0<br>50.0 |           |           |           |           |           | μΑ<br>μΑ  |       |
| Typical Junction Capacitance (Note 1)  | Cj       | 15.0        |           |           |           |           |           |           | pF    |
| Operating Temperature (Note 2)   | R(ja)    | 50.0        |           |           |           |           |           |           | °C // |
| Storage and Operation Junction Temperature   | Tstg, Tj | -55 to +150 |           |           |           |           |           | C         |       |

Note:

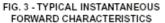
1. Measured at 1.0 MHz and applied voltage of 4.0Vdc

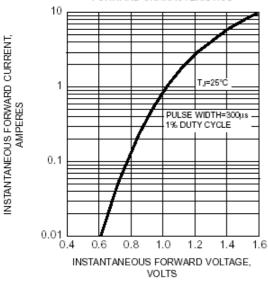
2. Thermal Resistance from Junction to Ambient at 0.375" lead length, P.C. Board Mounted

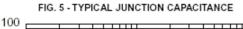
#### **RATINGS AND CHARACTERISTIC CURVES GPP1A THRU GPP1M**

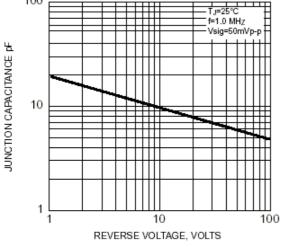


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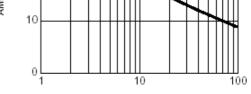






FORWARD SURGE CURRENT 30 Tj=Tj max. 8.3ms SINGLE HALF SINE-WAVE FORWARD SURGE CURRENT, AMPERES (JEDEC Method) 20

FIG. 2 - MAXIMUM NON-REPETITIVE PEAK



NUMBER OF CYCLES AT 60 Hz

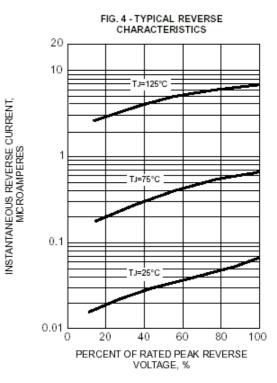
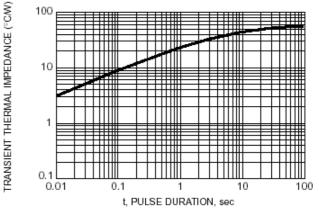


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE



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