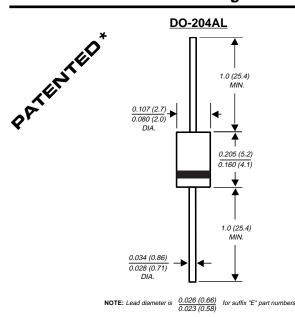
# **GP08A THRU GP08J**

## **GLASS PASSIVATED JUNCTION RECTIFIER**

Reverse Voltage - 50 to 600 Volts Forward Current - 0.8 Ampere



Dimensions in inches and (millimeters)

\*\* Glass-plastic encapsulation technique is covered by
Patent No.3,996,602 and brazed-lead assembly by Patent No.3,930,306



#### **FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction
- Capable of meeting environmental standards of MIL-S-19500
- ♦ 0.8 Ampere operation at T<sub>A</sub>=55°C with no thermal runaway
- Typical IR less than 0.1μA
- High temperature soldering guaranteed: 350°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

#### **MECHANICAL DATA**

**Case:** JEDEC DO-204AL molded plastic over glass body **Terminals:** Plated axial leads, solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

**Mounting Position:** Any **Weight:** 0.012 ounce, 0.3 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

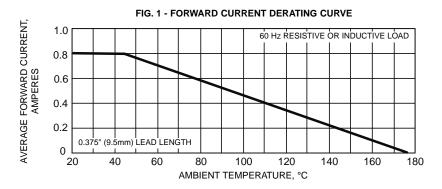
	SYMBOLS	GP08A	GP08B	GP08D	GP08G	GP08J	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at TA =55°C	I <sub>(AV)</sub>			8. 0			Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T <sub>A</sub> =55°C	IFSM	25.0					Amps
Maximum instantaneous forward voltage at 0.8A	VF	1.3					Volts
Maximum full load reverse current full cycle average 0.375" (9.5mm) lead length at TA=55°C	I <sub>R(AV)</sub>	30.0					μΑ
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C	IR	5.0 50.0					μА
Typical reverse recovery time (NOTE 1)	trr	2.0				μs	
Typical junction capacitance (NOTE 2)	СJ	8.0				pF	
Typical thermal resistance (NOTE 3)	Roja	55.0				°C/W	
Operating junction and storage temperature range	TJ, TSTG	-65 to +175				°C	

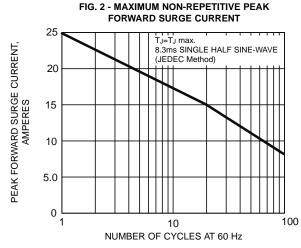
#### NOTES:

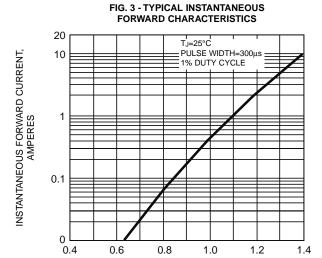
- (1) Measure on IF =0.5A, IR =1.0A,  $I_{rr}$  = 0.25A
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



# RATINGS AND CHARACTERISTIC CURVES GP08A THRU GP08J







INSTANTANEOUS FORWARD VOLTAGE, VOLTS

