# PG5400 THRU PG5408

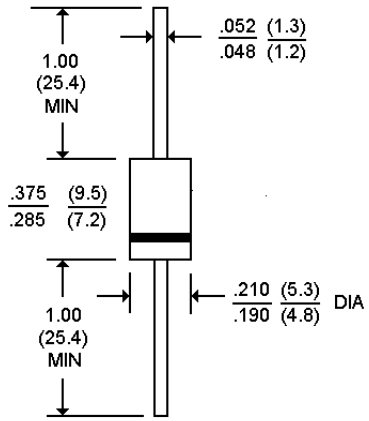
## GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER

## VOLTAGE - 50 to 1000 Volts  CURRENT - 3.0 Amperes

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction in DO-201AD package
- 3.0 ampere operation at $T_A$=55 ¢J with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Low reverse leakage current

**DO-201AD**




Dimensions in inches and (millimeters)

### MECHANICAL DATA

Case: Molded plastic

Terminals: Axial leads, solderable per MIL-STD-202, Method 208

Mounting Position: Any

Weight: 0.04 ounce, 1.1 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| | PG5400 | PG5401 | PG5402 | PG5404 | PG5406 | PG5407 | PG5408 | UNITS |
|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_A$=55 ¢J | 3.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | 150 | | | | | | | A |
| Maximum Forward Voltage at 3.0A | 1.2 | | | | | | | V |
| Maximum Reverse Current at $T_a$=25 ¢J<br>At Rated DC Blocking Voltage $T_a$=100 ¢J | 5.0<br>100 | | | | | | | £g A<br>£g A |
| Typical Junction capacitance (Note 1) | 30 | | | | | | | $_P$F |
| Typical Thermal Resistance R £KJA(Note 2) | 20 | | | | | | | ¢J/W |
| Typical Reverse Recovery Time(Note 3) | 2 | | | | | | | £g S |
| Operating and Storage Temperature Range $T_A$ | -55 to +150 | | | | | | | ¢J |

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Thermal resistance from junction to ambient and from junction to lead at 0.375”(9.5mm) lead length P.C.B mounted
3. Reverse Recovery Test Conditions: $I_F$=.5A, $I_R$=1A, Irr=2.5A

RATING AND CHARACTERISTIC CURVES

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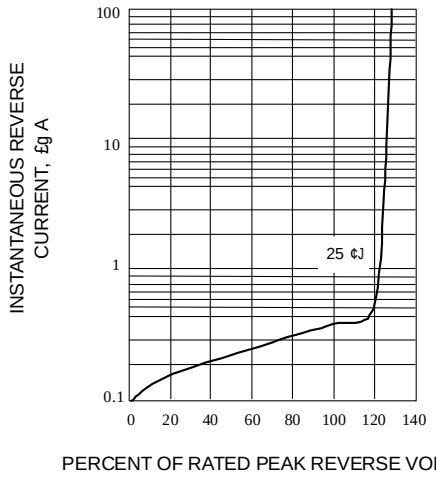


Fig. 1-TYPICAL REVERSE CHARACTERISTICS

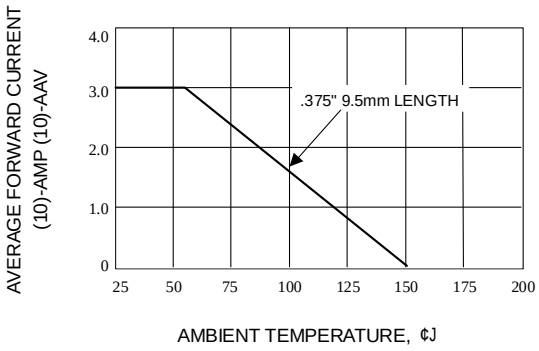


Fig. 2-FORWARD DERATING CURVE

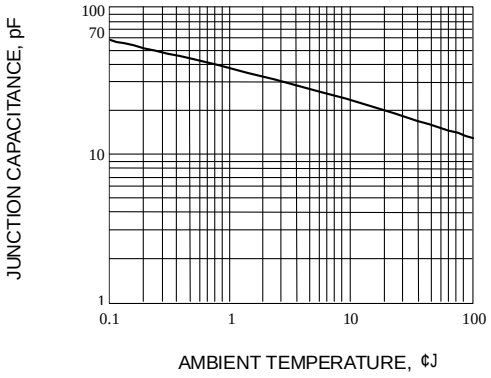


Fig. 3-FORWARD CURRENT DERATING CURVE

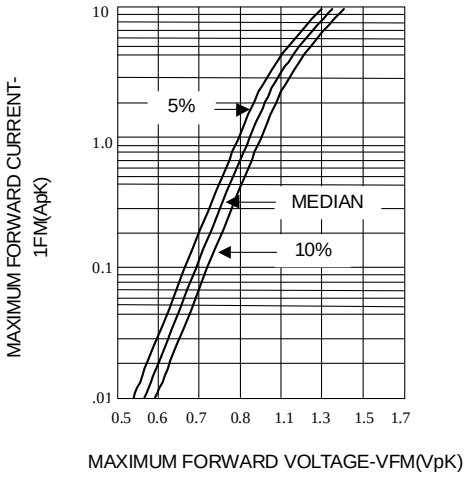


Fig. 4-TYPICAL JUNCTION CAPACITANCE

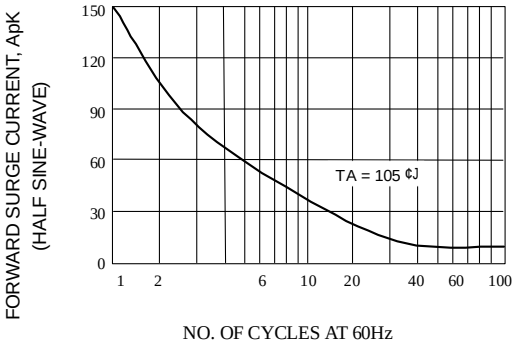


Fig. 5-MAXIMUM OVERLOAD SURGE CURRENT