# PG5400~PG5408

## GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER

**VOLTAGE** 50 to 1000 Volts **CURRENT** 3.0 Amperes

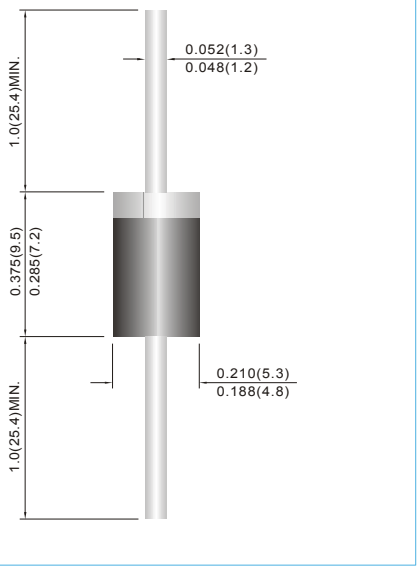
### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction
- Exceeds environmental standards of MIL-S-19500/228
- Lead free in comply with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: Molded plastic, DO-201AD
- Terminals: Axial leads, solderable to MIL-STD-750,Method 2026
- Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.0395 ounce, 1.122 gram

**DO-201AD** Unit : inch(mm)




### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load,derate current by 20%.

| PARAMETER | SYMBOL | PG5400 | PG5401 | PG5402 | PG5403 | PG5404 | PG5405 | PG5406 | PG5407 | PG5408 | UNITS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 35 | 70 | 140 | 210 | 280 | 350 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | V |
| Maximum Average Forward Current .375"(9.5mm) lead length | $I_{F(AV)}$ | 3.0 | | | | | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | $I_{FSM}$ | 150 | | | | | | | | | A |
| Maximum Forward Voltage at 3.0A | $V_F$ | 1.2 | | | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J$=25°C<br>$T_J$=100°C | $I_R$ | 1.0<br>100 | | | | | | | | | μA |
| Typical Junction Capacitance (Note 1) | $C_J$ | 30 | | | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JL}$<br>$R_{\theta JC}$ | 24<br>19 | | | | | | | | | °C / W |
| Operating Junction and Storage Temperature Range | $T_J$,$T_{STG}$ | -55 to +150 | | | | | | | | | °C |

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.

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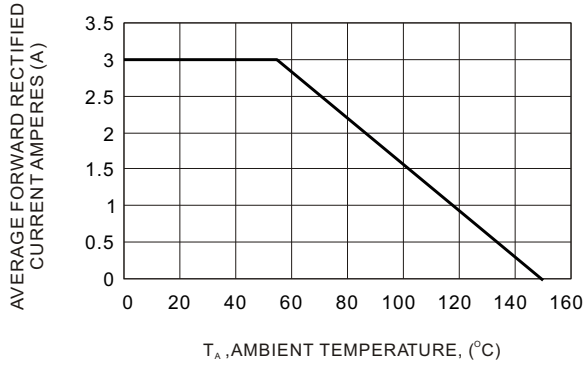


Fig.1- FORWARD CURRENT DERATING CURVE

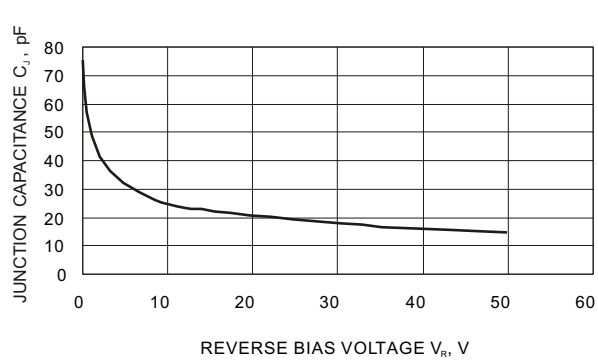


Fig.2- TYPICAL JUNCTION CAPACITANCE UNDER BIAS

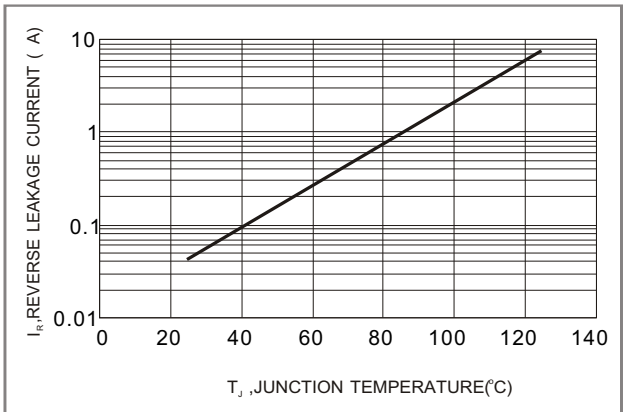


Fig.3- TYPICAL LEAKAGE CURRENT vs JUNCTION TEMPERATURE

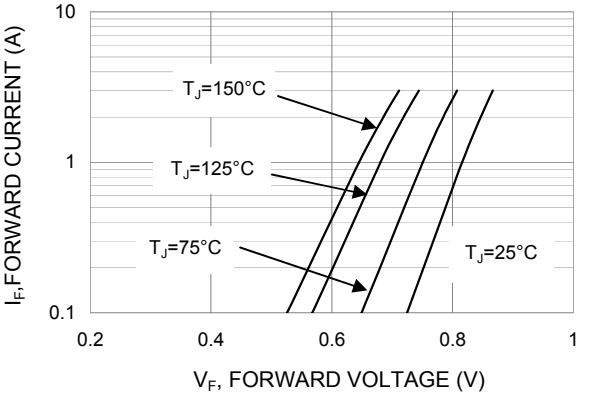


Fig.4- TYPICAL FORWARD CHARACTERISTICS

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