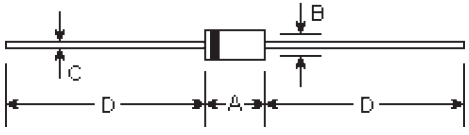
# DR200G THRU DR210G

**GLASS PASSIVATED JUNCTION RECTIFIER**
**Reverse Voltage -** 50 to 1000 Volts
**Forward Current -** 2.0 Amperes

## Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing Flame retardant epoxy molding compound
- 2.0 ampere operation at $T_A$=55℃ with no thermal runaway
- Glass passivated junction in DO-15 package

**DO-15**




## Mechanical Data

- **Case:** Molded plastic, DO-15
- **Terminals:** Axial leads, solderable per MIL-STD-202, method 208
- **Polarity:** Color band denotes cathode
- **Mounting Position:** Any
- **Weight:** 0.014 ounce, 0.395 gram

| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| DIM | inches | | mm | | Note |
| | Min. | Max. | Min. | Max. | |
| A | 0.228 | 0.299 | 5.8 | 7.6 | |
| B | 0.102 | 0.142 | 2.6 | 3.6 | ϕ |
| C | 0.028 | 0.034 | 0.71 | 0.86 | ϕ |
| D | 1.000 | - | 25.40 | - | |

## Maximum Ratings and Electrical Characteristics

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

| | Symbols | DR 200G | DR 201G | DR 202G | DR 204G | DR 206G | DR 208G | DR 210G | Units |
|---|---|---|---|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC blocking voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A$=55℃ | $I_{(AV)}$ | 2.0 | | | | | | | Amps |
| Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method) | $I_{FSM}$ | 70.0 | | | | | | | Amps |
| Maximum forward voltage at 2.0A | $V_F$ | 1.1 | | | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage $T_J$=25℃ / $T_J$=100℃ | $I_R$ | 5.0 / 300.0 | | | | | | | μA |
| Typical junction capacitance (Note 1) | $C_J$ | 40.0 | | | | | | | pF |
| Typical thermal resistance (Note 2) | $R_{\theta JA}$ | 25.0 | | | | | | | ℃/W |
| Operating and storage temperature range | $T_J$, $T_{STG}$ | -55 to +150 | | | | | | | ℃ |

**Notes:**

(1) Measured at 1.0MHz 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

## RATINGS AND CHARACTERISTIC CURVES

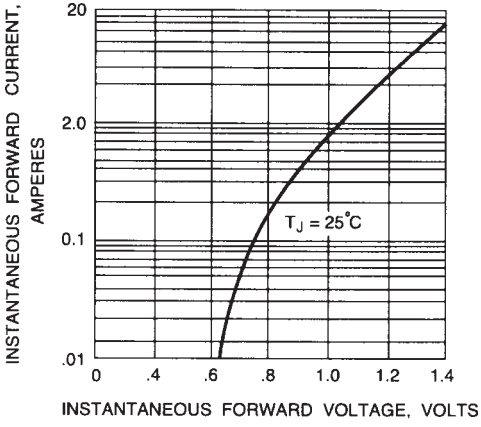



Fig. 1 – TYPICAL FORWARD CHARACTERISTICS

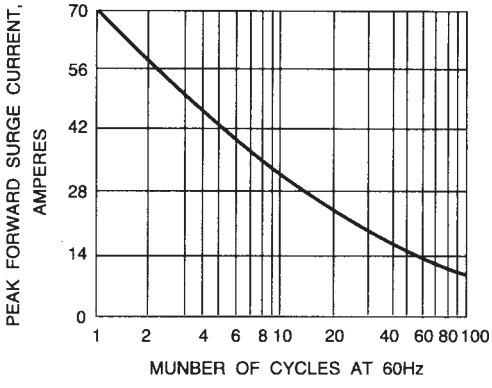



Fig. 2 – PEAK FORWARD SURGE CURRENT

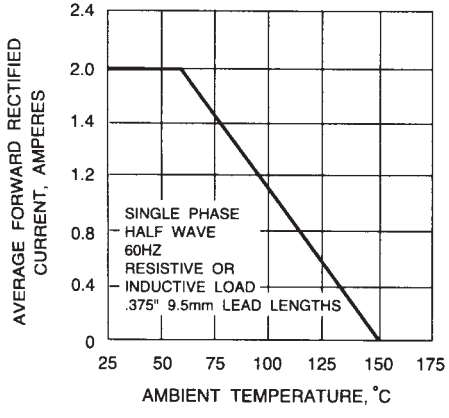



Fig. 3 – FORWARD CURRENT DERATING CURVE

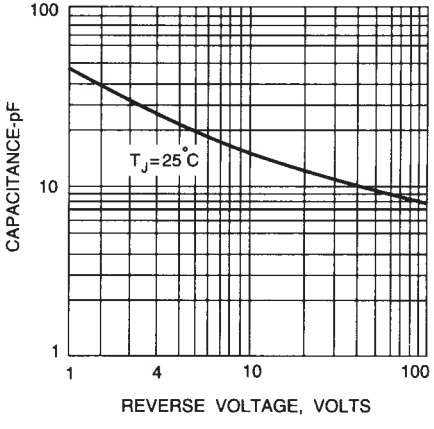



Fig. 4 – TYPICAL JUNCTION CAPACITANCE