

PR201~PR207

FAST RECOVERY PLASTIC RECTIFIER

VOLTAGE 50 to 1000 Volt **CURRENT** 2.0 Ampere

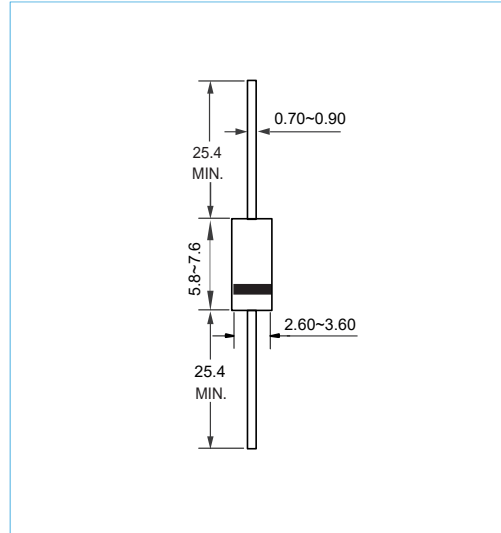
DO-15 Unit:mm

FEATURES

- Low Leakage Current
- High current capability
- High reliability
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

| PARAMETER | SYMBOL | PR201 | PR202 | PR203 | PR204 | PR205 | PR206 | PR207 | UNITS |
|---|-----------------|-------------|-------|-------|-------|-------|-------|-------|-----------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 7000 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Current (see FIG.1) | $I_{F(AV)}$ | 2.0 | | | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 60 | | | | | | | A |
| Maximum Forward Voltage at 2.0 A | V_F | 1.30 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 5.0 100 | | | | | | | μA |
| Maximum Reverse Recovery Time(Note 1) | t_{rr} | 150 | | | | 250 | 500 | | ns |
| Thermal Resistance | $R_{\theta JA}$ | 50 | | | | | | | $^{\circ}C / W$ |
| Typical Junction Capacitance (Note2) | C_J | 30 | | | | | | | pF |
| Operating Junction Temperature Range | T_J | -55 to +150 | | | | | | | $^{\circ}C$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^{\circ}C$ |

NOTES:

1. Reverse Recovery Test Conditions: $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$
2. Measured at 1.0MHz and applied reverse voltage of 4.0 volt

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RATING AND CHARACTERISTIC CURVES

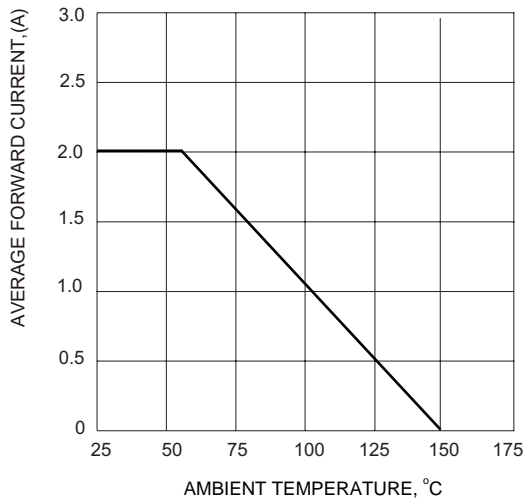


Fig. 1 Forward Current Derating Curve

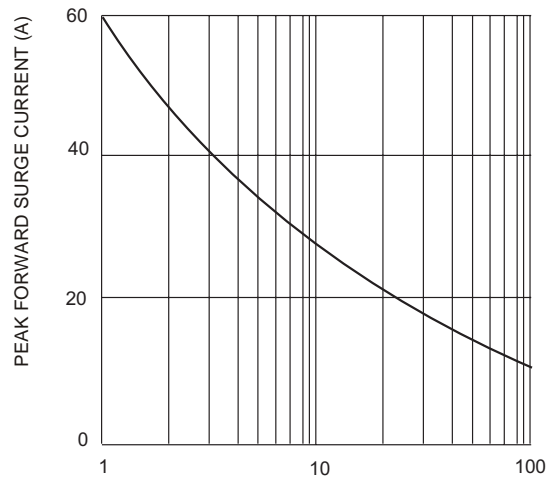


Fig. 2 Surge Current Derating Curve

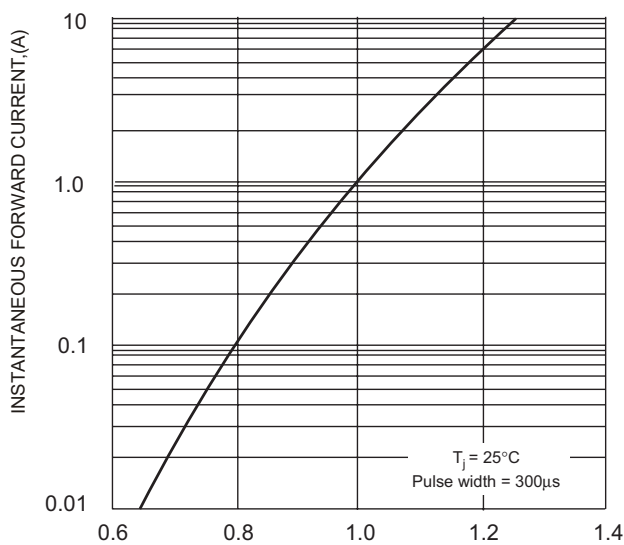


Fig. 3 Typical Forward Characteristics

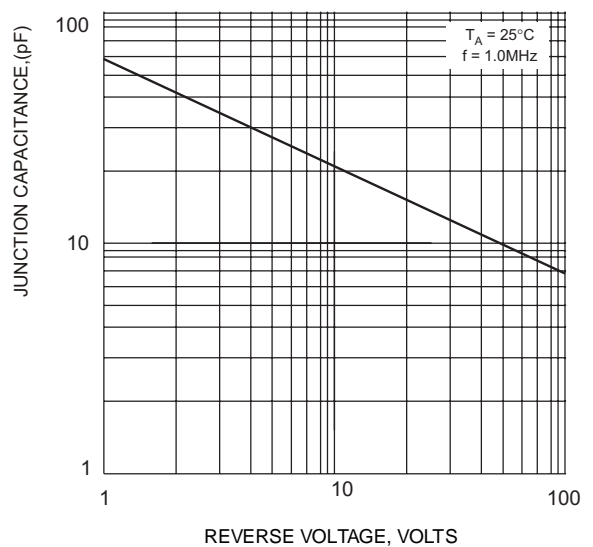
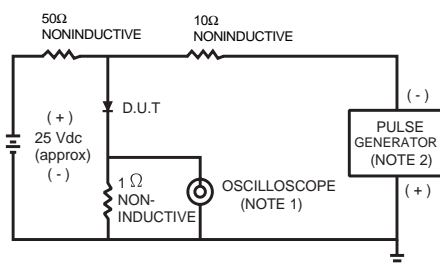


Fig. 4 Typical Junction Capacitance



NOTES:
 3. Rise time = 7.0 ns max; Input impedance = 1.0 megaohm 22 pf.
 4. Rise time = 10 ns max; Source impedance = 50 ohms.

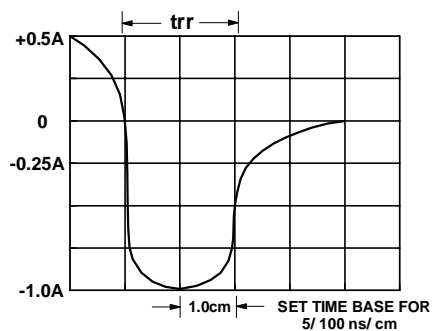


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

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ORDER INFORMATION

- Packing information

| Part Number | Case | Reel Size | QUANTITY |
|-------------|-------|-----------|----------|
| PR201~PR207 | DO-15 | 13 Inch | 4000 |