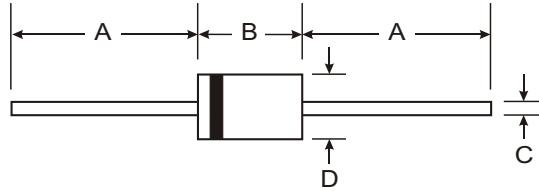


### Features

- Ultra-Fast Switching Speed
- High Reverse Breakdown Voltage
- Low Forward Voltage Drop
- Guard Ring Junction Protection



### Mechanical Data

- Case: DO-35, Glass
- Leads: Solderable per MIL-STD-202, Method 208
- Marking: Type Number
- Polarity: Cathode Band
- Weight: 0.13 grams (approx.)

| DO-35                |       |      |
|----------------------|-------|------|
| Dim                  | Min   | Max  |
| A                    | 25.40 | —    |
| B                    | —     | 4.00 |
| C                    | —     | 0.60 |
| D                    | —     | 2.00 |
| All Dimensions in mm |       |      |

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Characteristic                                       | Symbol          | 1N5711      | Unit                      |
|--|-----------------|-------------|---------------------------|
| Peak Repetitive Reverse Voltage                      | $V_{RRM}$       | 70          | V                         |
| Working Peak Reverse Voltage                         | $V_{RWM}$       |             |                           |
| DC Blocking Voltage                                  | $V_R$           |             |                           |
| RMS Reverse Voltage                                  | $V_{R(RMS)}$    | 49          | V                         |
| Forward Continuous Current                           | $I_{FM}$        | 15          | mA                        |
| Power Dissipation (Note 1)                           | $P_d$           | 400         | mW                        |
| Thermal Resistance, Junction to Ambient Air (Note 1) | $R_{\theta JA}$ | 300         | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range                          | $T_j$           | -55 to +125 | $^\circ\text{C}$          |
| Storage Temperature Range                            | $T_{STG}$       | -55 to +150 | $^\circ\text{C}$          |

### Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Characteristic                     | Symbol      | Min | Max          | Unit | Test Condition  |
|------------------------------------|-------------|-----|--------------|------|---|
| Reverse Breakdown Voltage (Note 2) | $V_{(BR)R}$ | 70  | —            | V    | $I_R = 10\mu\text{A}$   |
| Reverse Leakage Current (Note 2)   | $I_R$       | —   | 200          | nA   | $V_R = 50\text{V}$  |
| Forward Voltage Drop (Note 2)      | $V_F$       | —   | 0.41<br>1.00 | V    | $I_F = 1.0\text{mA}$<br>$I_F = 15\text{mA}$                                   |
| Junction Capacitance               | $C_j$       | —   | 2.0          | pF   | $V_R = 0\text{V}$ , $f = 1.0\text{MHz}$                                       |
| Reverse Recovery Time              | $t_{rr}$    | —   | 1.0          | ns   | $I_F = I_R = 5.0\text{mA}$ ,<br>$I_{rr} = 0.1 \times I_R$ , $R_L = 100\Omega$ |

- Notes:
1. Valid provided that leads are kept at ambient temperature.
  2. Short duration test pulse used to minimize self-heating effect.

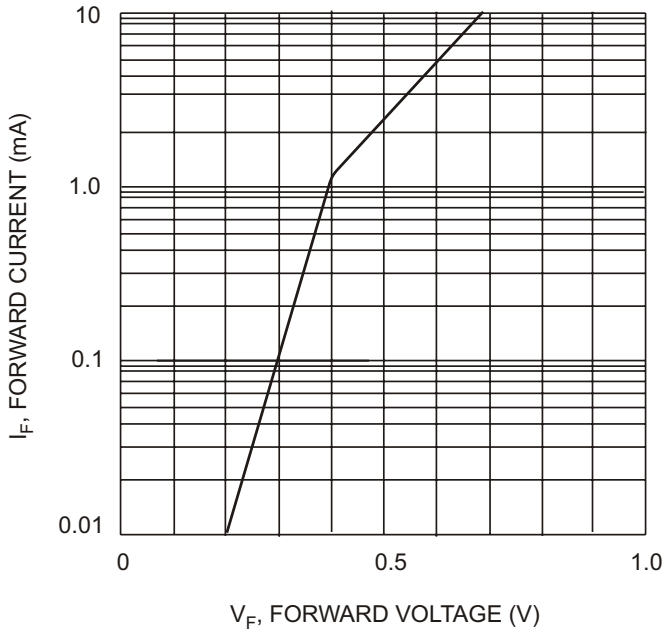


Fig. 1 Typical Forward Characteristics

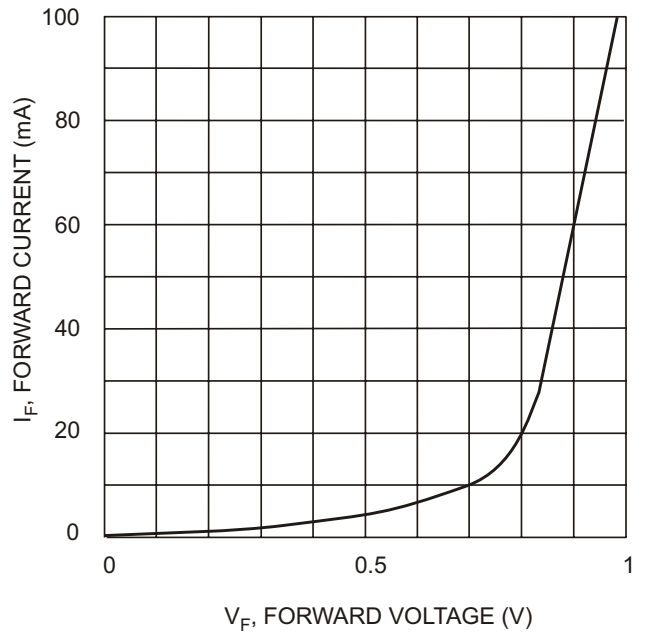


Fig. 2 Typical Forward Characteristics

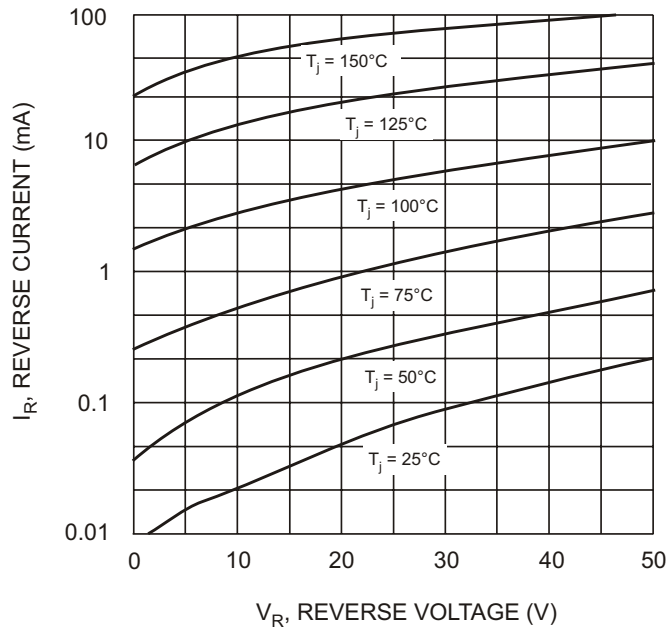


Fig. 3 Typical Reverse Characteristics

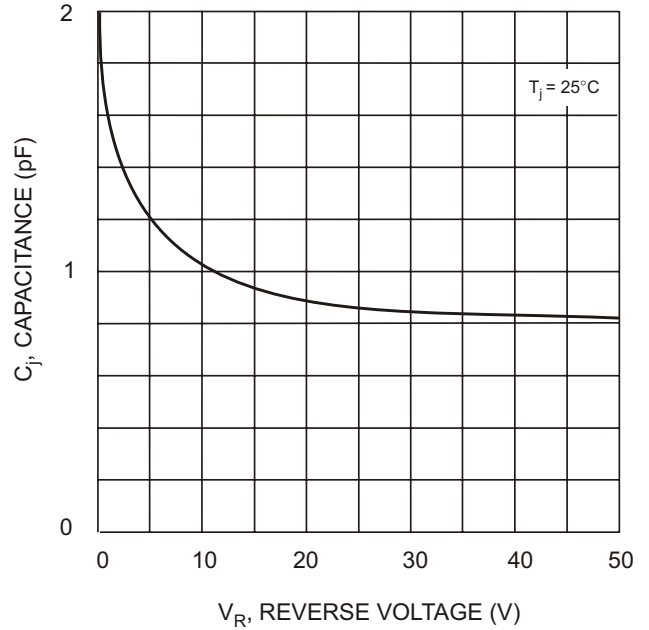


Fig. 4 Typ. Junction Capacitance vs Reverse Voltage