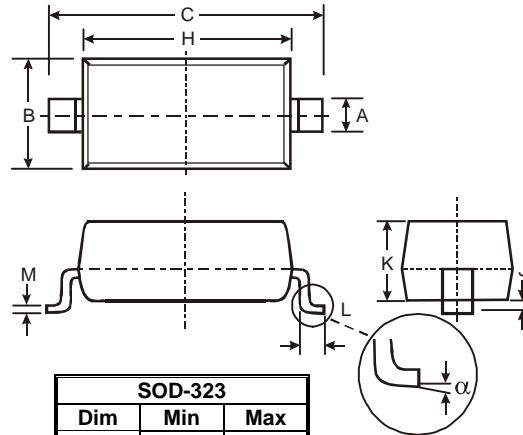


Features

- Extremely Fast Switching Speed
- Low Forward Voltage – 0.35 Volts (Typ) @ $I_F = 10 \text{ mA}$
- Device Marking: JV
- Pb-Free Package is Available



Mechanical Data

- Case Molded Plastic

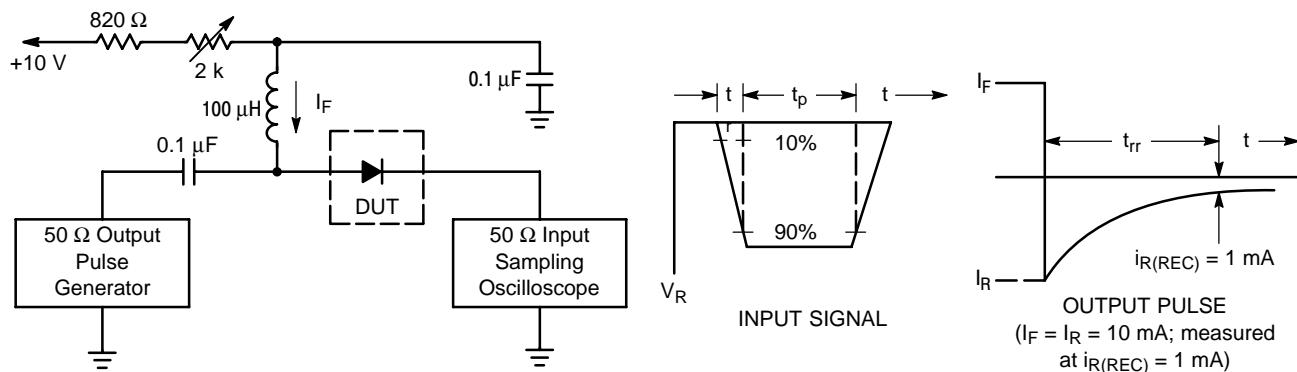
| SOD-323 | | |
|----------|------|------|
| Dim | Min | Max |
| A | 0.25 | 0.35 |
| B | 1.20 | 1.40 |
| C | 2.30 | 2.70 |
| H | 1.60 | 1.80 |
| J | 0.00 | 0.10 |
| K | 1.0 | 1.1 |
| L | 0.20 | 0.40 |
| M | 0.10 | 0.15 |
| α | 0° | 8° |

All Dimensions in mm

Maximum Ratings and Electrical Characteristics

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

| Rating | Symbol | Value | | Unit | | |
|--|--------------------|-------|------|------|---------------|--|
| Reverse Voltage | V_R | 30 | | V | | |
| Characteristic | Symbol | Min | Typ | Max | Unit | |
| Reverse Breakdown Voltage ($I_R = 10 \mu\text{A}$) | $V_{(\text{BR})R}$ | 30 | — | — | Volts | |
| Total Capacitance ($V_R = 1.0 \text{ V}$, $f = 1.0 \text{ MHz}$) | C_T | — | 7.6 | 10 | pF | |
| Reverse Leakage ($V_R = 25 \text{ V}$) | I_R | — | 0.5 | 2.0 | μA | |
| Forward Voltage ($I_F = 0.1 \text{ mA}$) | V_F | — | 0.22 | 0.24 | Vdc | |
| Forward Voltage ($I_F = 30 \text{ mA}$) | V_F | — | 0.41 | 0.5 | Vdc | |
| Forward Voltage ($I_F = 100 \text{ mA}$) | V_F | — | 0.52 | 0.8 | Vdc | |
| Reverse Recovery Time ($I_F = I_R = 10 \text{ mA}$, $I_{R(\text{REC})} = 1.0 \text{ mA}$) Figure 1 | t_{rr} | — | — | 5.0 | ns | |
| Forward Voltage ($I_F = 1.0 \text{ mA}$) | V_F | — | 0.29 | 0.32 | Vdc | |
| Forward Voltage ($I_F = 10 \text{ mA}$) | V_F | — | 0.35 | 0.40 | Vdc | |
| Forward Current (DC) | I_F | — | — | 200 | mA | |
| Repetitive Peak Forward Current | I_{FRM} | — | — | 300 | mA | |
| Non-Repetitive Peak Forward Current ($t < 1.0 \text{ s}$) | I_{FSM} | — | — | 600 | mA | |



- Notes:
1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
 2. Input pulse is adjusted so $I_{R(\text{peak})}$ is equal to 10 mA.
 3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

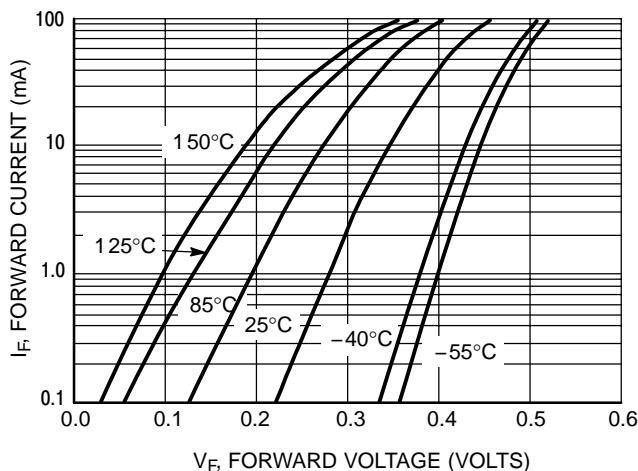


Figure 2. Forward Voltage

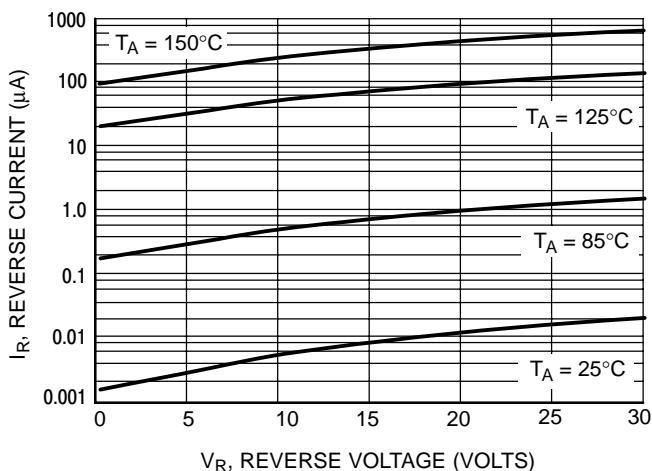


Figure 3. Leakage Current

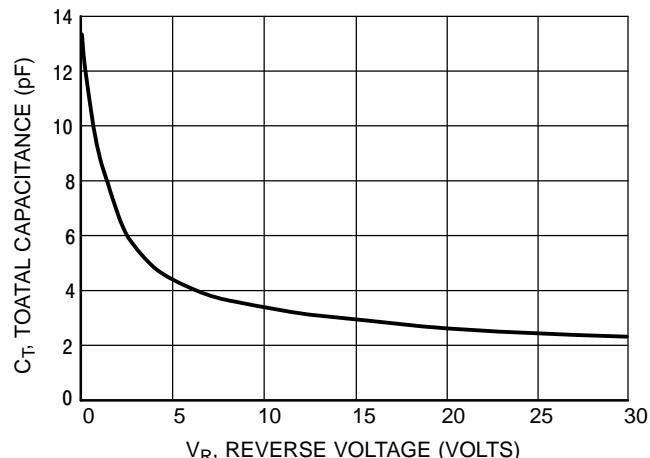


Figure 4. Total Capacitance