# Silicon Switching Diode

**1N4153, 1N4153-1**

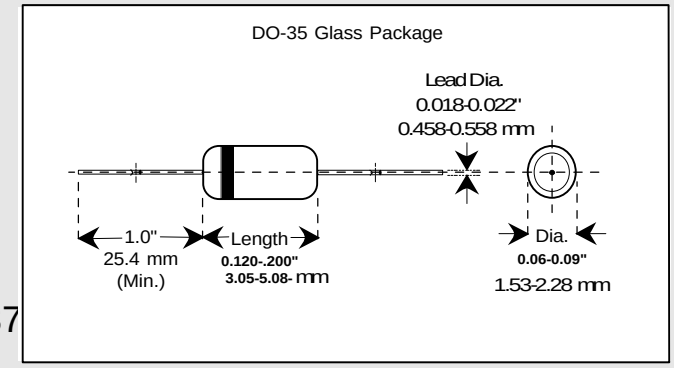
**DO-35 Glass Package**

## Applications

Used in general purpose applications,where a low current controlled forward characteristic and fast switching speed are important.

## Features

- Six sigma quality
- Metallurgically bonded
- BKC's Sigma Bond™ plating for problem free solderability
- LL-34/35 MELF SMD available
- Full approval to Mil-S-19500/337
- Available up to JANTXV-1 levels
- "S" level screening available to SCDs




| Maximum Ratings | Symbol | Value | Unit |
|---|---|---|---|
| Peak Inverse Voltage | PIV | 75 (Min.) | Volts |
| Average Rectified Current | $I_{Avg}$ | 150 | mAmps |
| Continuous Forward Current | $I_{Fdc}$ | 300 | mAmps |
| Peak Surge Current ($t_{peak}$ = 1 Sec.) | $I_{peak}$ | 0.25 | Amp |
| BKC Power Dissipation $T_L$ = 50 °C, L = 3/8" from body | $P_{tot}$ | 500 | mWatts |
| Operating and Storage Temperature Range | $T_{Op\ \&\ St}$ | -65 to +200 | °C |

| Electrical Characteristics @ 25 °C* | Symbol | Minimum | Maximum | Unit |
|---|---|---|---|---|
| Forward Voltage @ $I_F$ = 100 µA $V_F$ | Vf | 0.49 | 0.55 | Volts |
| Forward Voltage @ $I_F$ = 250 µA $V_F$ | Vf | 0.53 | 0.59 | Volts |
| Forward Voltage @ $I_F$ = 1.0 mA $V_F$ | Vf | 0.59 | 0.67 | Volts |
| Forward Voltage @ $I_F$ = 2.0 mA $V_F$ | Vf | 0.62 | 0.70 | Volts |
| Forward Voltage @ $I_F$ = 10 mA | $V_F$ | 0.70 | 0.81 | Volts |
| Forward Voltage @ $I_F$ = 20 mA | $V_F$ | 0.74 | 0.88 | Volts |
| Reverse Leakage Current @ $V_R$ = 50 V | $I_R$ | | 0.05(50 @ 150 °C) | µA |
| Breakdown Voltage @ $I_R$ = 5.0 µA | PIV | 75 | | Volts |
| Capacitance @ $V_R$ = 0 V, f = 1mHz | $C_T$ | | 2.0 | pF |
| Reverse Recovery Time (note 1) | $t_{rr}$ | | 4.0 | nSecs |
| Reverse Recovery Time (note 2) | $t_{rr}$ | | 2.0 | nSec |

Note 1: Per Method 4031-A with $I_F$ = $I_R$ = 10 mA, $R_L$ = 100 Ohms, C = 3 Pf. *Unless Otherwise Specified

Note2: Per Method 4031-A with $I_F$ = $I_R$ = 10 mA, Rr = 6 Volts, Rl=100 ohms.

Microsemi

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