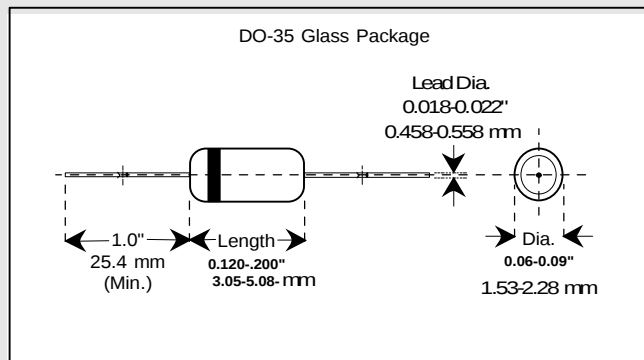


## Applications

Used in general purpose applications, where a 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-19500/231
- Available up to JANTXV-1 levels
- "S" level screening available to Source Control Drawings



| Maximum Ratings                                                               |  | Symbol     | Value       | Unit                                |               |
|-------------------------------------------------------------------------------|--|------------|-------------|-------------------------------------|---------------|
| Peak Inverse Voltage                                                          |  | PIV        | 75 (Min.)   | Volts                               |               |
| Average Rectified Current                                                     |  | $I_{Avg}$  | 200         | mAmps                               |               |
| Continuous Forward Current                                                    |  | $I_{Fdc}$  | 400         | mAmps                               |               |
| Peak Surge Current ( $t_{peak} = 1$ sec.)                                     |  | $I_{peak}$ | 0.5         | Amp                                 |               |
| BKC Power Dissipation $T_L=50\text{ }^{\circ}\text{C}$ , $L = 3/8"$ from body |  | $P_{tot}$  | 500         | mWatts                              |               |
| Operating Temperature Range                                                   |  | $T_{Op}$   | -65 to +200 | $^{\circ}\text{C}$                  |               |
| Storage Temperature Range                                                     |  | $T_{St}$   | -65 to +200 | $^{\circ}\text{C}$                  |               |
| Electrical Characteristics @ 25 $^{\circ}\text{C}$                            |  | Symbol     | Minimum     | Maximum                             | Unit          |
| Forward Voltage Drop @ $I_F = 1.0\text{ mA}$                                  |  | $V_F$      | 0.54        | 0.62                                | Volts         |
| Forward Voltage Drop @ $I_F = 10\text{ mA}$                                   |  | $V_F$      | 0.66        | 0.74                                | Volts         |
| Forward Voltage Drop @ $I_F = 50\text{ mA}$                                   |  | $V_F$      | 0.76        | 0.86                                | Volts         |
| Forward Voltage Drop @ $I_F = 100\text{ mA}$                                  |  | $V_F$      | 0.80        | 0.92                                | Volts         |
| Forward Voltage Drop @ $I_F = 200\text{ mA}$                                  |  | $V_F$      | 0.87        | 1.0                                 | Volts         |
| Reverse Leakage Current @ $V_R = 50\text{ V}$                                 |  | $I_r$      |             | 0.1 (100 @ 150 $^{\circ}\text{C}$ ) | $\mu\text{A}$ |
| Breakdown Voltage @ $I_r = 0.1\text{ mA}$                                     |  | P IV       | 75          |                                     | Volts         |
| Capacitance @ $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$                         |  | $C_T$      |             | 2.5                                 | pF            |
| Reverse Recovery time (note 1)                                                |  | $t_{rr}$   |             | 4.0                                 | nSecs         |
| Reverse Recovery time (note 2,3)                                              |  | $t_{rr}$   |             | 6.0                                 | nSecs         |
| Forward Recovery time (note 4)                                                |  | $V_{fr}$   |             | 10                                  | nSecs         |

Note 1: Per Method 4031-A with  $I_F = I_R = 10$  to 200 mA,  $R_L = 100$  Ohms, recover to 0.1 If.

Note 2: Per Method 4031-A with  $I_F = I_R = 200$  to 400 mA,  $R_L = 100$  Ohms, recover to 0.1 If.

Note 3: Per Method 4031-A with  $I_F = 10$  microA,  $I_R = 1.0$  mA, recover to 0.1 mA.

Note 4: Per Method 4026 with  $I_F = 200$  mA,  $I_R = 1.0$  mA, recover to 0.1 mA.