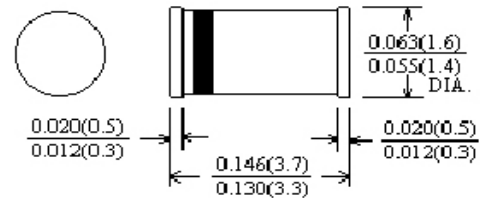


### 1N4150 mini-M.E.L.F. SIGNAL DIODE

#### MINI MELF (LL-34)

#### Mechanical Data

|             |                           |
|-------------|---------------------------|
| Items       | Material                  |
| Package     | mini MELF                 |
| Case        | Hermetically sealed glass |
| Lead/Finish | Double stud/Tin Plating   |
| Chip        | Glass Passivated          |



*Hermetically Sealed, Glass Silicon Diodes*

#### Absolute Maximum Ratings (Ta=25 °C)

|  | Symbol    | Value       | UNIT |
|--|-----------|-------------|------|
| Reverse Voltage (continuous)                   | $V_R$     | 50          | V    |
| Power Dissipation at Tamb= 25 °C<br>3.33mW/ °C | $P_{tot}$ | 500         | mW   |
| Forward Current (DC)                           | $I_F$     | 300         | mA   |
| Average Rectified Output Current               | $I_O$     | 200         | mA   |
| Repetitive Peak Forward Current                | $I_{FRM}$ | 600         | mA   |
| Junction Temperature                           | $T_j$     | -65 to +200 | °C   |
| Storage Temperature Range                      | $T_S$     | -65 to +200 | °C   |

#### Electrical Characteristics (Ta=25 °C)

|   | Symbol       | Min | Max          | Unit    |
|---|--------------|-----|--------------|---------|
| Minimum Breakdown Voltage @ $I_R= 100\mu A$   | BV           | 75  | -            | V       |
| Peak Forward Surge Current<br>PW<1 sec  | $I_{Fsurge}$ | -   | 500          | mA      |
| Maximum Forward Voltage $I_F = 200$ mA  | $V_F$        | -   | 1.0          | V       |
| Maximum reverse Leakage Current<br>at $V_R = 50V$<br>at $V_R = 50V, T_j = 150$ °C   | $I_R$        | -   | 0.100<br>100 | $\mu A$ |
| Maximum Junction Capacitance<br>$V_R= 0, f= 1MHz$   | $C_j$        | -   | 2.5          | pF      |
| Reverse Recovery Time<br>$I_F=10mA$ to $200mA, I_R=10mA$ to $200mA$<br>$R_L=100$ ohms<br>Measured @ $I_R= 0.1I_F$                   | trr          | -   | 4            | ns      |
| Forward Recovery Time<br>Measured from $I=0$ to $I_F=200mA$<br>$t_r=0.4ns, t_p=100ns, Duty Cycle \leq 1.0\%$<br>Measured @ $V_F=1V$ | tfr          | -   | 10           | ns      |
| Maximum Thermal Resistance<br>Junction to Ambient Air   | $R_{thJA}$   | -   | 0.35         | °C/mW   |