

DL4150**200mA
Small Signal
Diodes
50 Volts****Features**

- For general purpose and switching
- Silicon Epitaxial Planar Diodes
- These diodes are also available in other case styles including: the DO-35 case with the type designations 1N4150, the SOD-123 case with the type designations 1N4150W
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates Compliant. See ordering information)

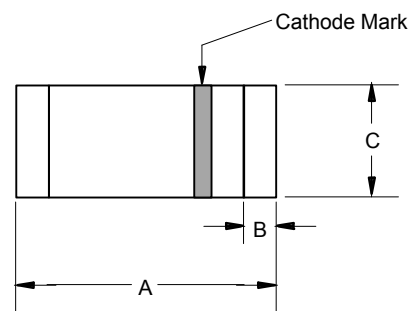
Maximum Ratings@ 25°C Unless Otherwise Specified

| Parameter | Symbol | Value | Condition |
|-------------------------------------|----------------|-----------------|---|
| Working Inverse Voltage | W_{IV} | 50V | |
| Maximum Rectified Current (Average) | I_o | 200mA | |
| DC Forward Current | I_F | 400mA | |
| Recurrent Peak Forward Current | i_{r} | 600mA | |
| Peak Forward Surge Current | $i_{f(surge)}$ | 1.0A 4.0A | Pulse Width=1.0s Pulse Width=1.0 μ s |
| Storage Temperature Range | T_{stg} | -65°C to +200°C | |
| Operating Junction Temperature | T_J | 175°C | |

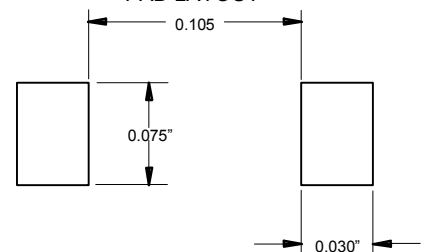
Thermal Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-----------------|--------------------|--|
| Total Device Dissipation Derate above 25°C | P_D | 500mW 3.33mW/°C | |
| Thermal Resistance, Junction to Ambient | $R_{\theta JA}$ | 300°C/W | |

Note:1.Lead in Glass Exemption Applied, see EU Directive Annex 5.

MINIMELF(SOD-80C)

| DIM | DIMENSION | | | | NOTE |
|-----|-----------|------|------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .134 | .142 | 3.40 | 3.60 | |
| B | .008 | .016 | 0.20 | 0.40 | |
| C | .055 | .059 | 1.40 | 1.50 | |

**SUGGESTED SOLDER
PAD LAYOUT**

DL4150

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Parameter | Symbol | Min | Max | Units | Test Conditions |
|-----------------------|----------|----------------------------------|---------------------------------|---------------------------|---|
| Breakdown Voltage | B_V | 75 | --- | V | $I_R=5.0 \mu A$ |
| Reverse Current | I_R | --- | 100 | nA μA | $V_R=50V$ $V_R=50V, T_A=150^\circ C$ |
| Forward Voltage | V_F | 540 660 760 820 0.57 | 620 740 860 920 1.0 | mV mV mV mV V | $I_F=1.0mA$ $I_F=10mA$ $I_F=50mA$ $I_F=100mA$ $I_F=200mA$ |
| Diode Capacitance | C_O | --- | 2.5 | pF | $V_R=0V, f=1.0MHz$ |
| Reverse Recovery Time | T_{RR} | --- | 4.0 6.0 | nS nS | $I_F=I_R=10mA-200mA, R_L=100 \Omega$ $I_F=I_R=200mA-400mA, R_L=100 \Omega$ |
| Forward Recovery Time | T_{FR} | --- | 10 | nS | $I_F=200mA, V_{FR}=1.0V$ |

Ordering Information

| Device | Packing |
|------------------|------------------------|
| (Part Number)-TP | Tape&Reel;2.5Kpcs/Reel |