



Micro Commercial Components

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# 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

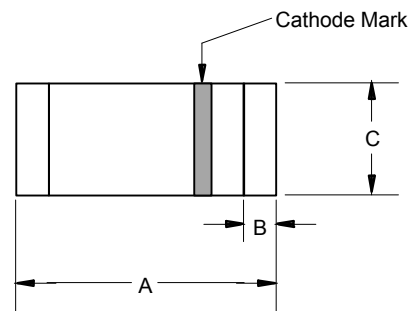
### Maximum Ratings @ 25°C Unless Otherwise Specified

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 $\mu$ 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

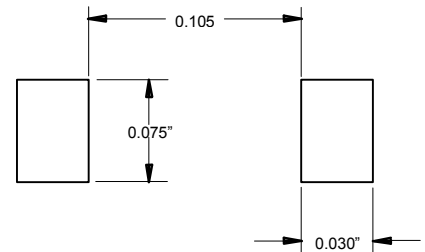
Total Device Dissipation Derate above 25°C	$P_D$	500mW 3.33mW/°C	
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	300°C/W	

### 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	$I_R$	---	100 100	nA $\mu A$	$V_R=50V$ $V_R=50V, T_A=150^\circ C$
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	$I_F=200mA, V_{FR}=1.0V$