



Micro Commercial Components



Micro Commercial Components  
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# DL4151

## 500mA Small Signal Diode 75 Volts

### Features

- Fast Switching Speed and Low Forward Voltage Drop
- High Reverse Breakdown Voltage and High Conductance
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Mechanical Data

- Case: MiniMELF, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.05 grams ( approx.)

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

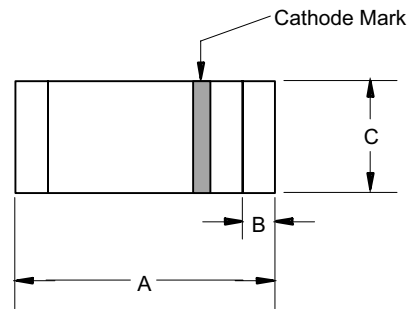
Parameter	Symbol	DL4151	Unit
Repetitive peak reverse voltage	$V_{RRM}$	75	V
RMS reverse voltage	$V_{R(RMS)}$	50	V
Peak forward surge current ( $t_p=1\mu s$ )	$I_{FSM}$	2	A
Repetitive peak forward current	$I_{FM}$	500	mA
Continuous forward current	$I_F$	300	mA
Average forward current	$I_{F(AV)}$	150	mA
Power dissipation	$P_D$	500	mW
Junction temperature	$T_j$	175	°C
Storage temperature range	$T_{stg}$	-65 to +175	°C

### Electrical Characteristics @ 25°C Unless Otherwise Specified

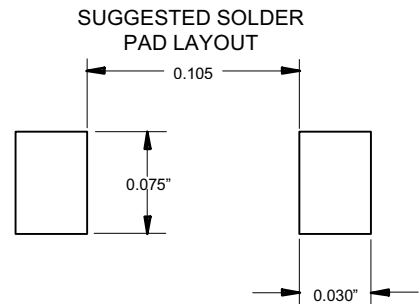
Paramet	Symbol	Min	Max	Unit	Test Conditions
Forward Voltage	$V_F$	....	1	V	$I_F=50mA$
Reverse Current	$I_R$	....	50	nA	$V_R=50V, T_j=25^\circ C$
		....	50	uA	$V_R=50V, T_j=125^\circ C$
Breakdown Voltage	$V_{(BR)}$	75	....	V	$I_R=5uA$
Junction Capacitance	$C_j$	....	2	pF	$V_R=0, f=1.0MHz$
Reverse recovery time	$t_{rr}$	....	2	ns	$I_F=10mA, V_R=6V, I_R=1mA, R_L=100\Omega$

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

### MINIMELF

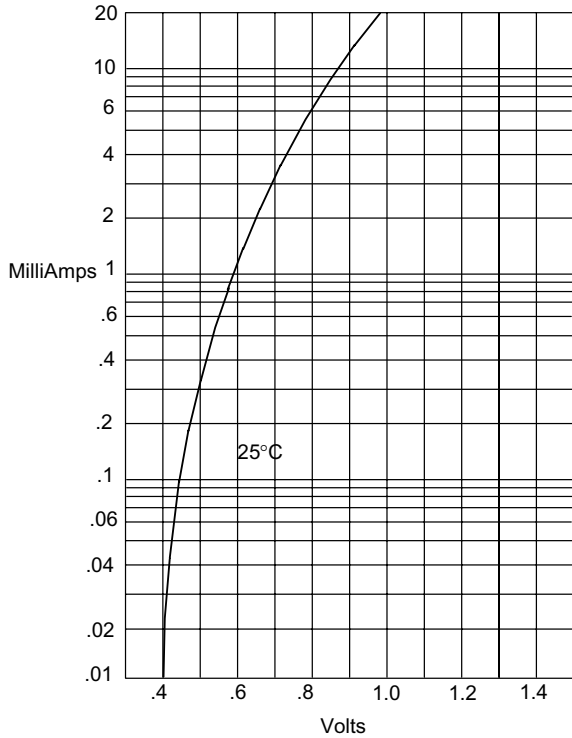


DIM	DIMENSION				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	0.20	0.40	
C	.055	.059	1.40	1.50	



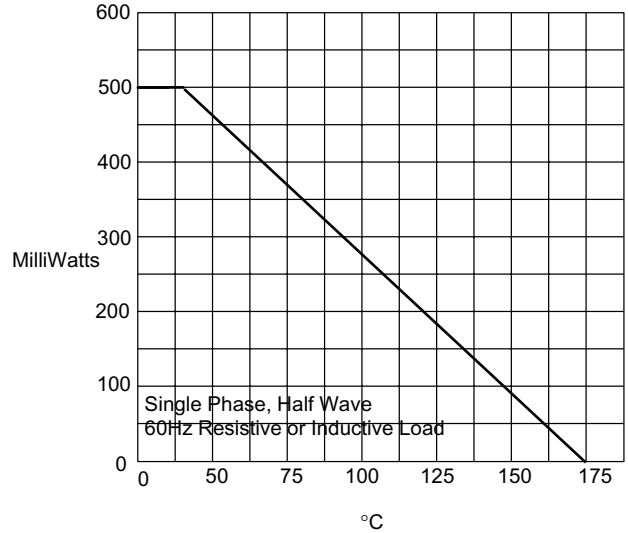
# DL4151

Figure 1  
Typical Forward Characteristics



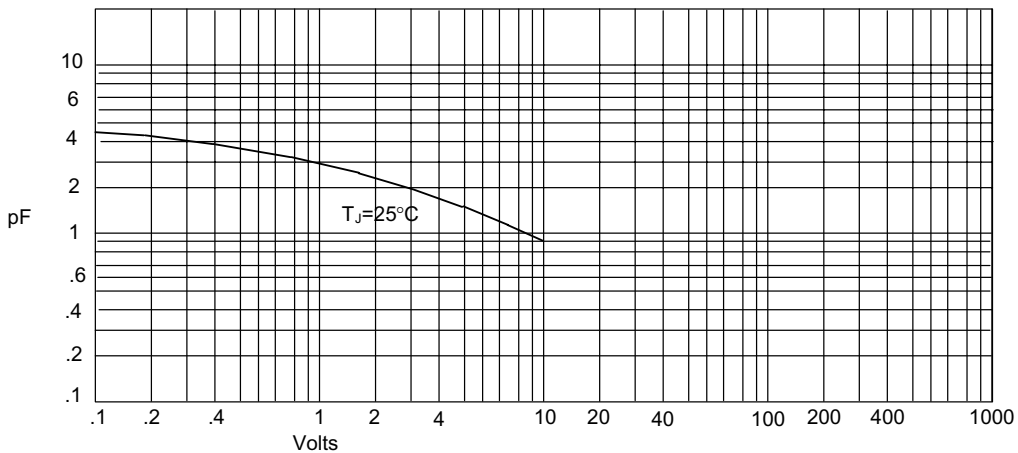
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Admissible Power Dissipation - MilliWatts *versus*  
Ambient Temperature - °C

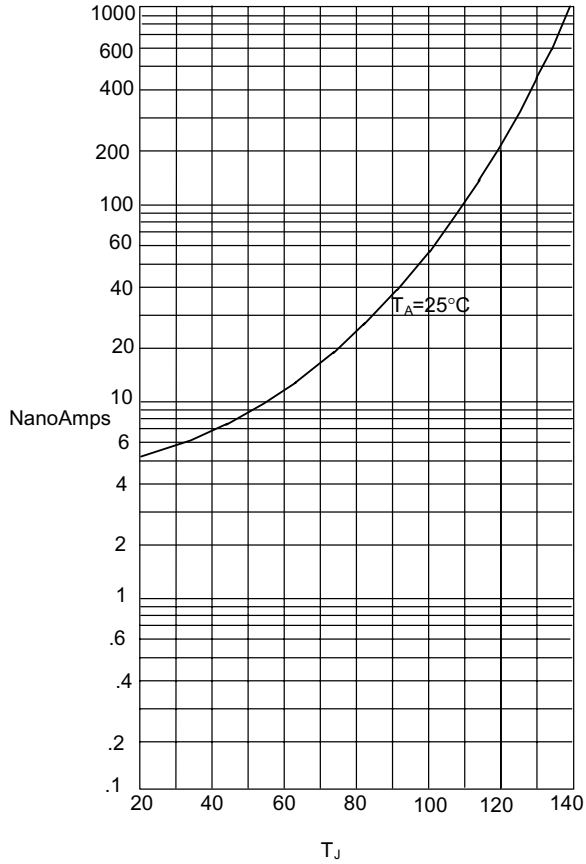
Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

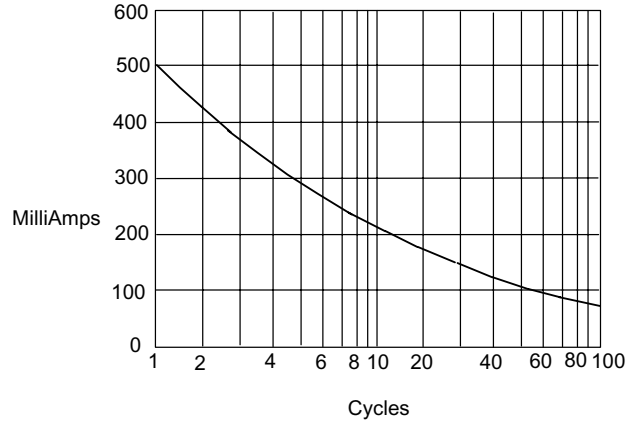
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Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - NanoAmperes versus Junction Temperature - °C

Figure 5  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus Number Of Cycles At 60Hz - Cycles



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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