

Obsolete

M.C.C.

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

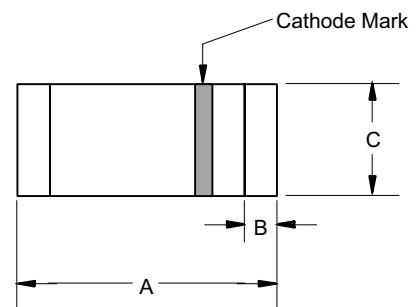
Parameter	Symbol	DL4151	Unit
Repetitive peak reverse voltage	V_{RRM}	75	V
RMS reverse voltage	$V_{R(RMS)}$	50	V
Peak forward surge current ($t_p=1\mu s$)	I_{FSM}	2	A
Repetitive peak forward current	I_{FM}	500	mA
Continuous forward current	I_F	300	mA
Average forward current	$I_{F(AV)}$	150	mA
Power dissipation	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

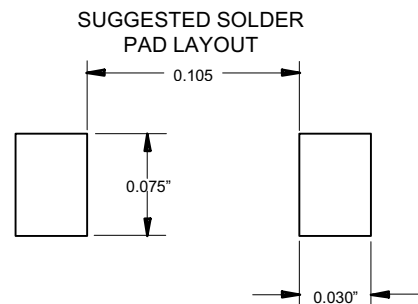
Paramet	Symbol	Min	Max	Unit	Test Conditions
Forward Voltage	V_F	....	1	V	$I_F=50mA$
Reverse Current	I_R	....	50	nA	$V_R=50V, T_j=25^\circ C$
		....	50	μA	$V_R=50V, T_j=125^\circ C$
Breakdown Voltage	$V_{(BR)}$	75	....	V	$I_R=5\mu A$
Junction Capacitance	C_j	....	2	pF	$V_R=0, f=1.0MHz$
Reverse recovery 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

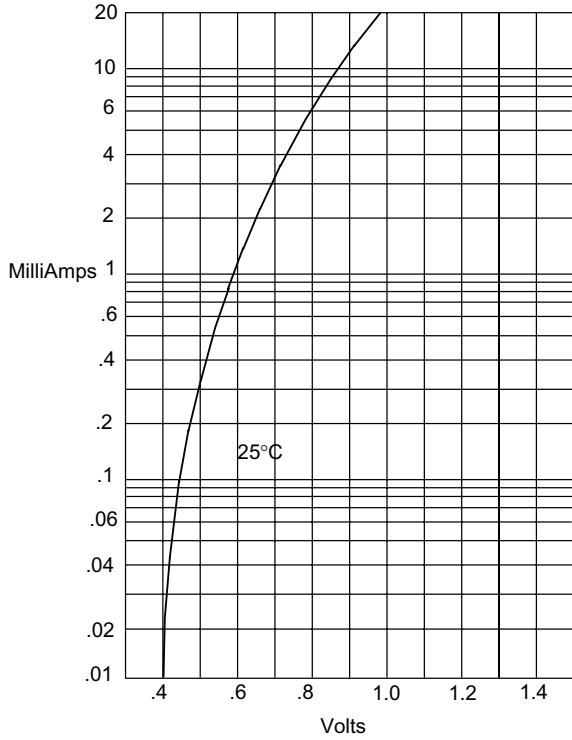


DIM	DIMENSION				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	0.20	0.40	
C	.055	.059	1.40	1.50	



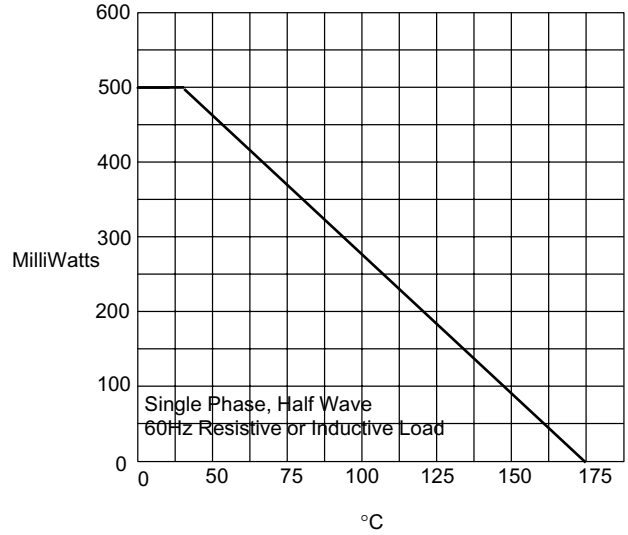
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Figure 1
Typical Forward Characteristics



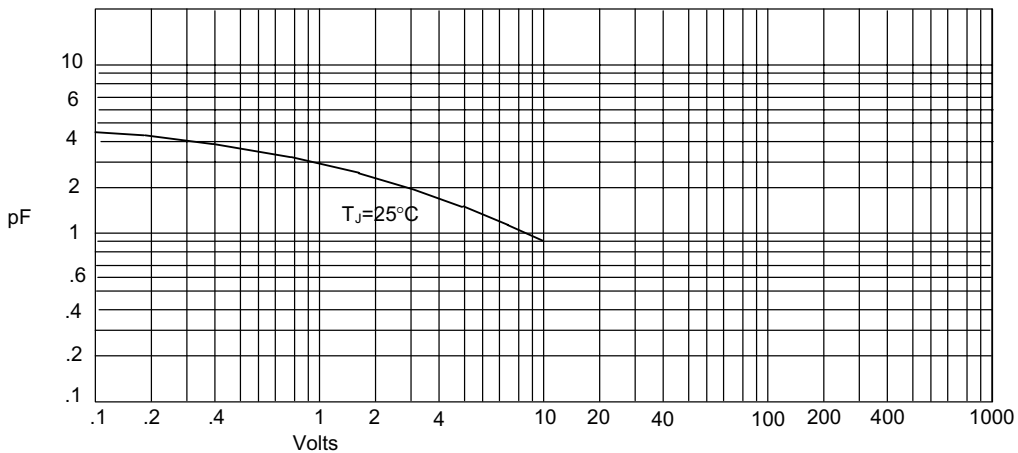
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

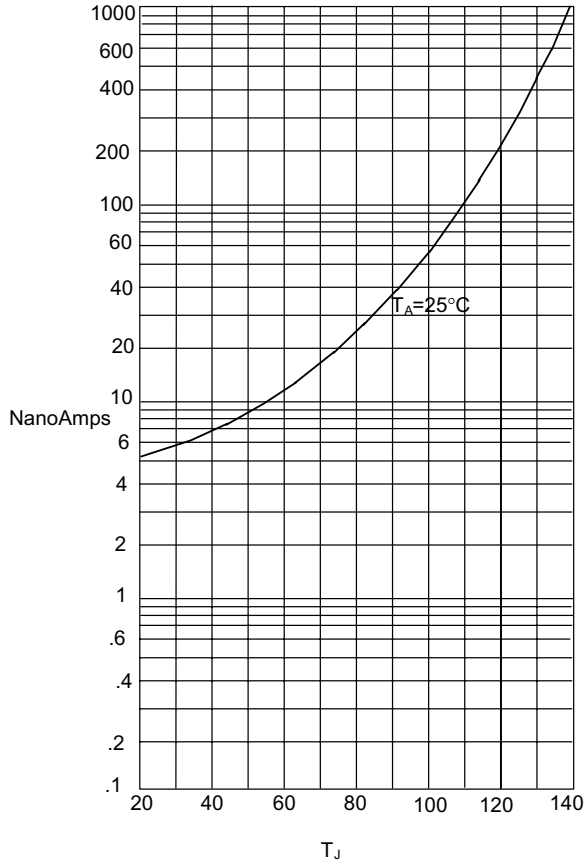
Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

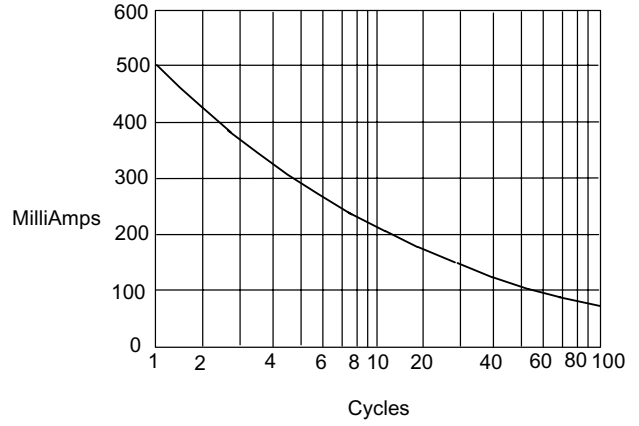
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Figure 4
Typical Reverse Characteristics



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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