



Micro Commercial Components



Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

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

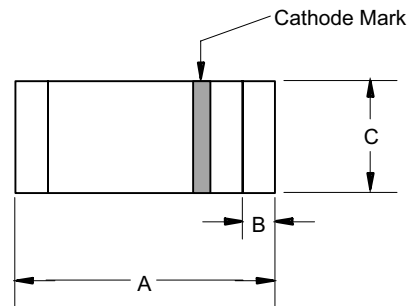
Parameter	Symbol	DL4151	Unit
Repetitive peak reverse voltage	V_{RRM}	75	V
RMS reverse voltage	$V_{R(RMS)}$	50	V
Peak forward surge current ($t_p=1\mu s$)	I_{FSM}	2	A
Repetitive peak forward current	I_{FM}	500	mA
Continuous forward current	I_F	300	mA
Average forward current	$I_{F(AV)}$	150	mA
Power dissipation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

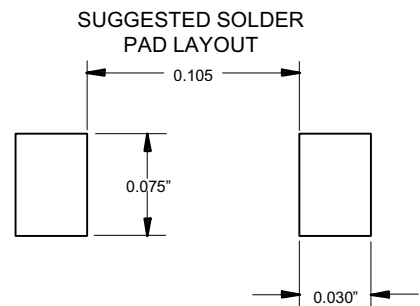
Paramet	Symbol	Min	Max	Unit	Test Conditions
Forward Voltage	V_F	....	1	V	$I_F=50mA$
Reverse Current	I_R	....	50	nA	$V_R=50V, T_j=25^\circ C$
		....	50	uA	$V_R=50V, T_j=125^\circ C$
Breakdown Voltage	$V_{(BR)}$	75	....	V	$I_R=5\mu A$
Junction Capacitance	C_j	....	2	pF	$V_R=0, f=1.0MHz$
Reverse recovery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

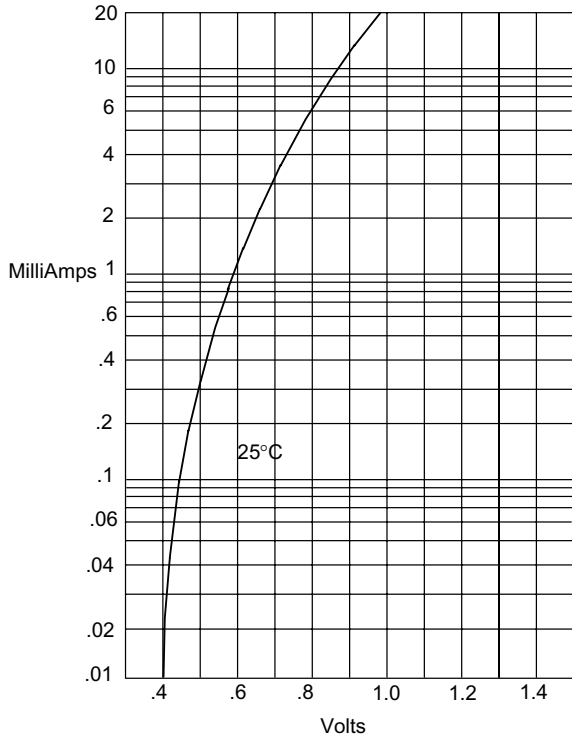


DIM	DIMENSION				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	0.20	0.40	
C	.055	.059	1.40	1.50	



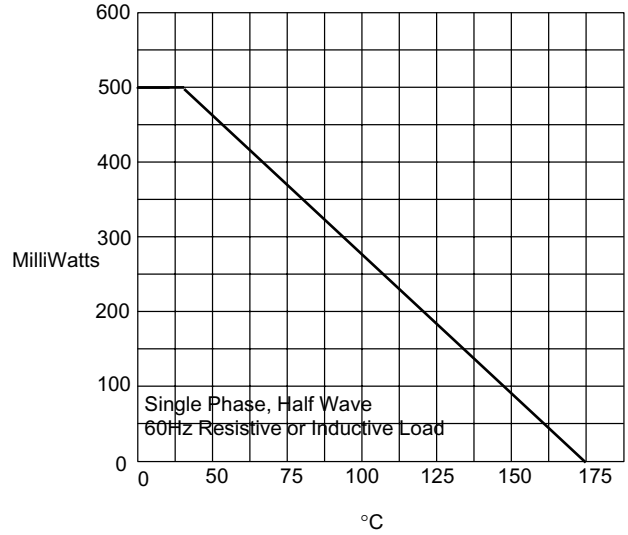
DL4151

Figure 1
Typical Forward Characteristics



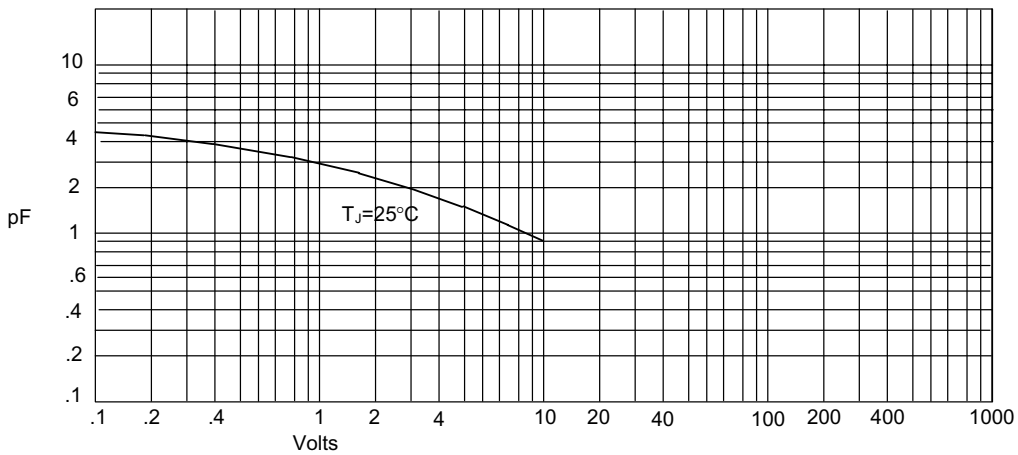
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

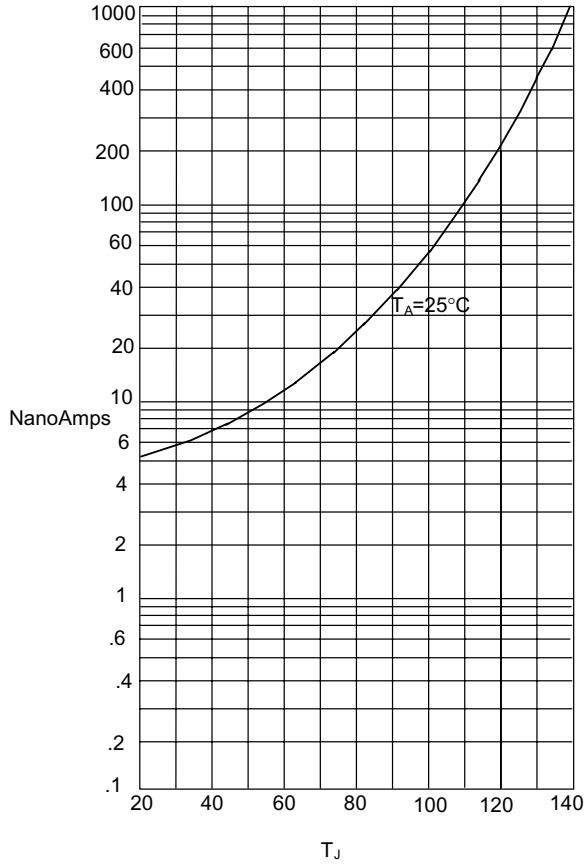
Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

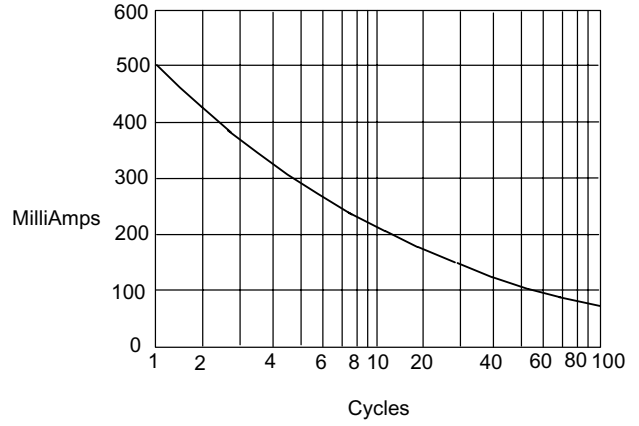
DL4151

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



Micro Commercial Components

Ordering Information :

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

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.