



Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4933 **DL4151**

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

500mA Small Signal Diode 75 Volts

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

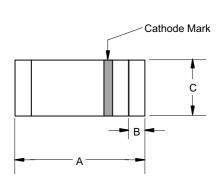
Parameter	Symbol	DL4151	Unit
Repetitive peak reverse voltage	V_{RRM}	75	V
RMS reverse voltage	$V_{R(RMS)}$	50	V
Peak forward surge current (t _p =1us)	I _{FSM}	2	Α
Repetitive peak forward current	I _{FM}	500	mA
Continuous forward current	l _F	300	mA
Average forward current	I _{F(AV)}	150	mA
Power dissipation	P_D	500	mW
Junction temperature	Tj	175	${\mathbb C}$
Storage temperature range	T_{stg}	-65 to +175	$^{\circ}\mathbb{C}$

Electrical Characteristics @ 25°C Unless Otherwise Specified

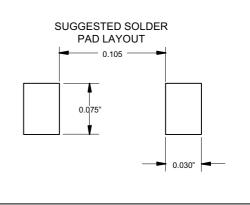
Paramet	Symbol	Min	Max	Unit	Test Conditions
Forward Voltage	V_{F}	:	1	٧	I _F =50mA
Reverse Current	I _R		50	nΑ	V _R =50V,T _j =25°C
			50	μΑ	V _R =50V,T _j =125℃
Breakdown Voltage	$V_{(BR)}$	75		V	I _R =5µA
Junction Capacitance	C_{j}		2	pF	V _R =0, f=1.0MHz
Reverse recovery time	t _{rr}		2	ns	I _F =10mA,
					$V_R=6V,I_R=1mA,$
					$R_L=100\Omega$

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

MINIMELF



DIMENSION					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
Α	.130	.146	3.30	3.70	
В	.008	.016	0.20	0.40	
С	.055	.059	1.40	1.50	

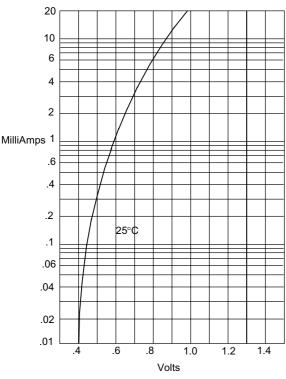


DL4151

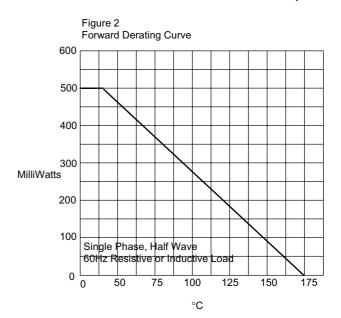
·M·C·C·

Micro Commercial Components

Figure 1
Typical Forward Characteristics

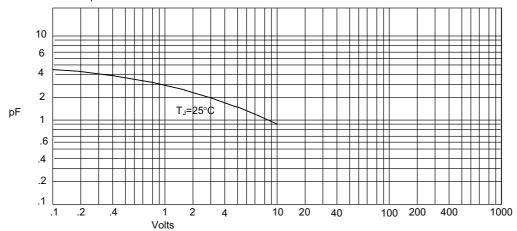


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



Admissable Power Dissipation - MilliWattsversus Ambient Temperature -°C

Figure 3
Junction Capacitance



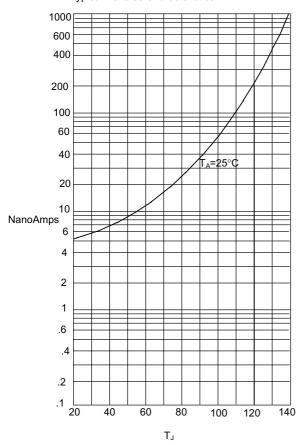
Junction Capacitance - pF*versus* Reverse Voltage - Volts

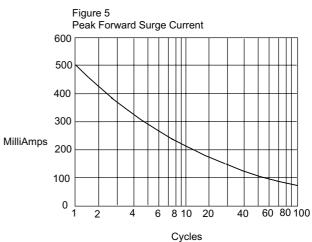
DL4151



Micro Commercial Components

Figure 4
Typical Reverse Characteristics





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

Instantaneous Reverse Leakage Current - NanoAmpere**s**ersus Junction Temperature - °C



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.