

**Micro Commercial Components** 

ROHS

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 **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

## **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 <sub>p</sub> =1us)	I <sub>FSM</sub>	2	Α
Repetitive peak forward current	I <sub>FM</sub>	500	mA
Continuous forward current	l <sub>F</sub>	300	mA
Average forward current	I <sub>F(AV)</sub>	150	mA
Power dissipation	$P_D$	500	mW
Junction temperature	Tj	175	$^{\circ}$
Storage temperature range	$T_{stg}$	-65 to +175	$^{\circ}$ C

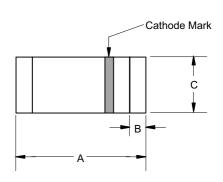
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Paramet	Symbol	Min	Max	Unit	<b>Test Conditions</b>
Forward Voltage	$V_{F}$		1	V	I <sub>F</sub> =50mA
Reverse Current	I <sub>R</sub>		50	nA	V <sub>R</sub> =50V,T <sub>j</sub> =25℃
			50	uA	V <sub>R</sub> =50V,T <sub>j</sub> =125℃
Breakdown Voltage	$V_{(BR)}$	75		V	I <sub>R</sub> =5uA
Junction Capacitance	$C_{j}$		2	pF	V <sub>R</sub> =0, f=1.0MHz
Reverse recovery time	t <sub>rr</sub>		2	ns	I <sub>F</sub> =10mA,
					$V_R=6V,I_R=1mA,$
					$R_L=100\Omega$

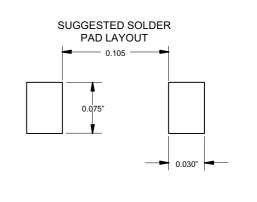
Note:1.Lead in Glass Exemption Applied, see EU Directive Annex 5.

# 500mA Small Signal Diode 75 Volts

## 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	

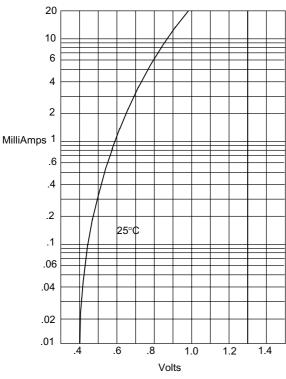


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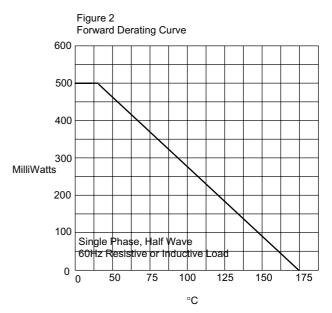
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Figure 1
Typical Forward Characteristics

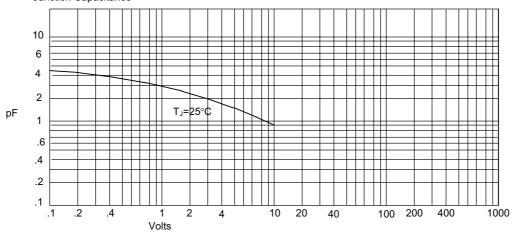


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



Admissable Power Dissipation - MilliWattsversus Ambient Temperature -°C

Figure 3
Junction Capacitance

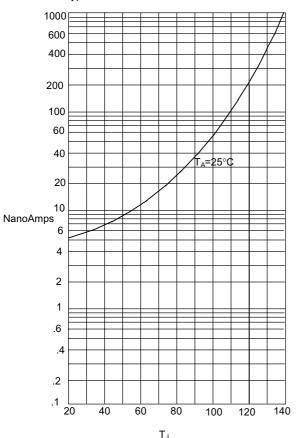


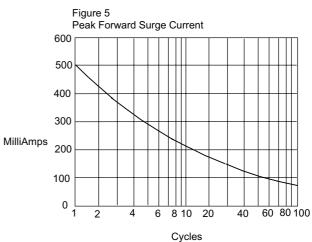
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Figure 4
Typical Reverse Characteristics





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

Instantaneous Reverse Leakage Current - NanoAmpere ${\it sersus}$  Junction Temperature -  ${\rm ^{\circ}C}$ 



#### **Ordering Information:**

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

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