



Micro Commercial Components
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DL4151

Schottky Barrier Switching Diode

Features

- Fast Switching Speed
- High Reverse Breakdown Voltage
- Low Forward Voltage Drop
- High Conductance

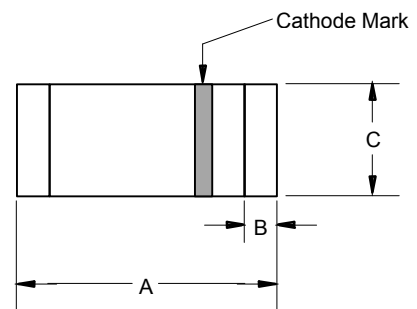
Mechanical Data

- 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

Characteristic	Symbol	DL4151	Unit
Peak Repetitive Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	75	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	50	V
Forward Continuous Current(Note1)	I_{FM}	500	mA
Power Dissipation(Note 1)	P_d	500	mW
Thermal Resistance(Note 1)	R	350	K/W
Operation/Storage Temp. Range	T_j, T_{STG}	-55 to 150	°C

MINIMELF



DIM	DIMENSION				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.134	.142	3.40	3.60	
B	.008	.016	0.20	0.40	
C	.055	.059	1.40	1.50	

Electrical Characteristics @ 25°C Unless Otherwise Specified

Charateristic	Symbol	Min	Max	Unit	Test Cond.
Reverse Leakage Current	I_{RM}	-----	50	nA	$V_R=50V$
Forward Volt. Drop	V_{FM}	-----	1	V	$I_F=50mA$
Junction Capacitance	C_j	-----	2.0	pF	$V_R=0V, f=1.0MHz$
Reverse Recovery Time	t_{rr}	-----	2.0	ns	$I_R=1mA, V_R= 6V$ $R_L=100OHM$

Note: 1. Valid provided that electrodes are kept at ambient temperature

SUGGESTED SOLDER PAD LAYOUT

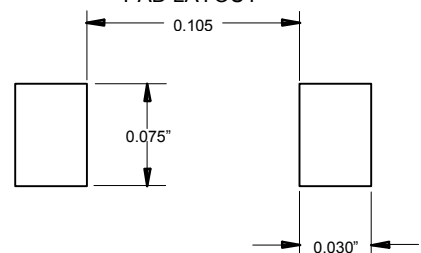
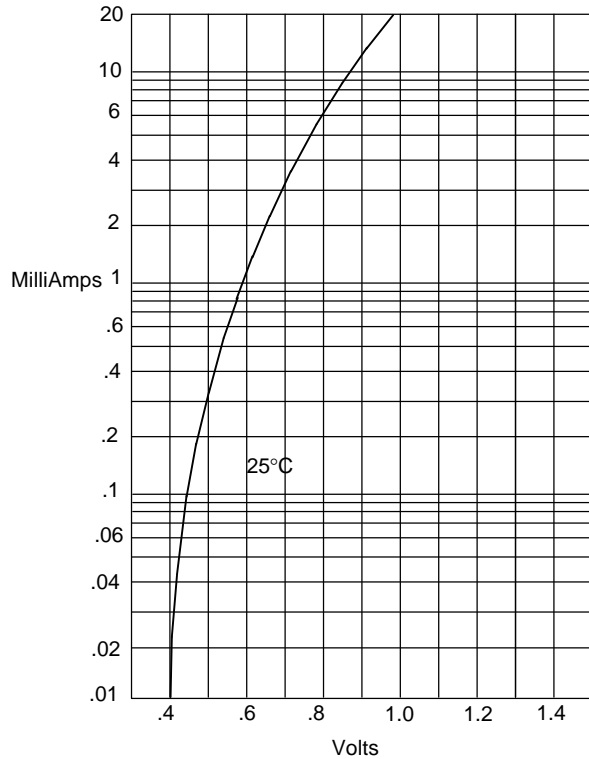
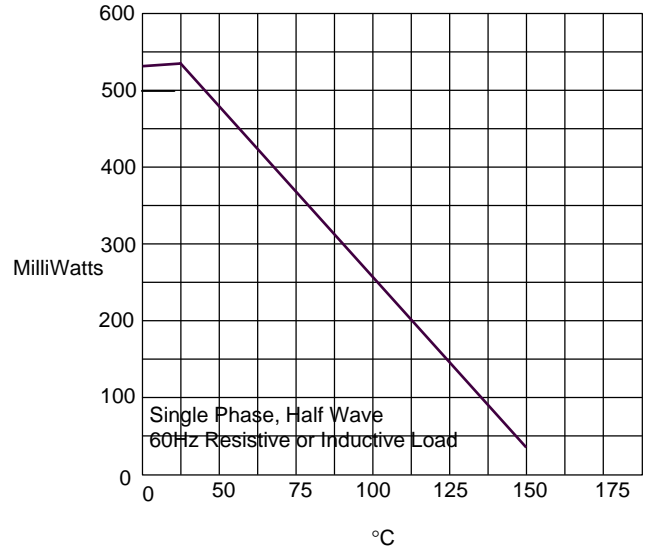


Figure 1
Typical Forward Characteristics



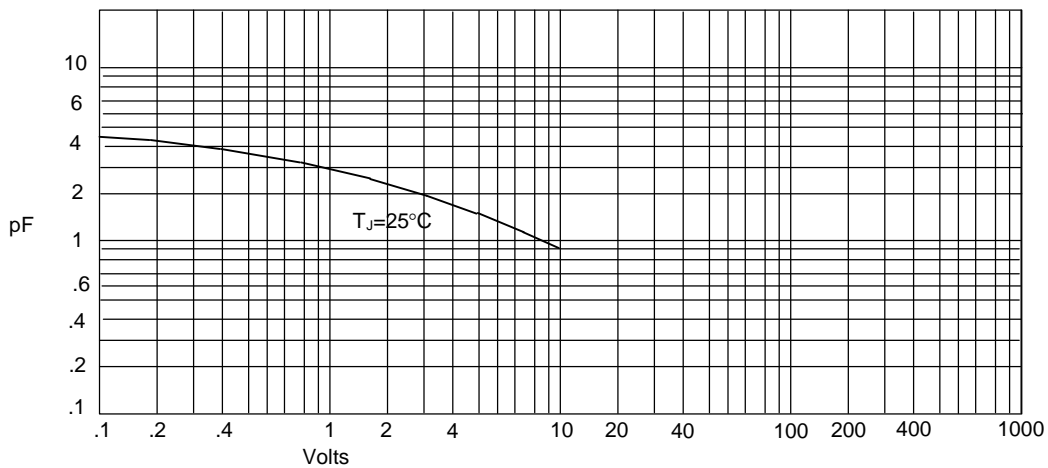
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



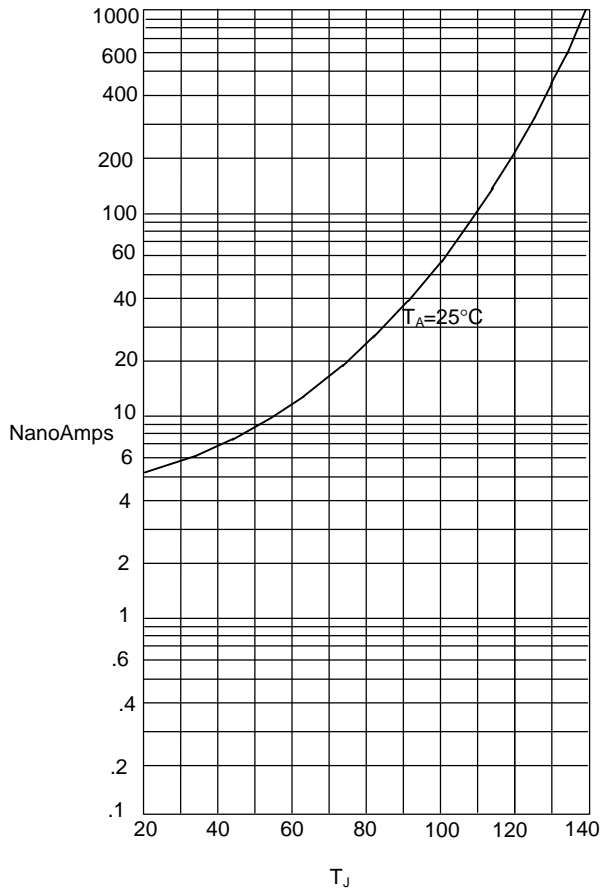
Admissible Power Dissipation - MilliWatts *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



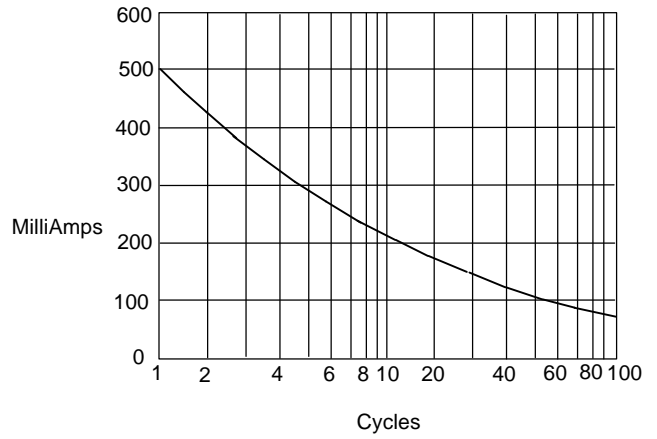
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

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