



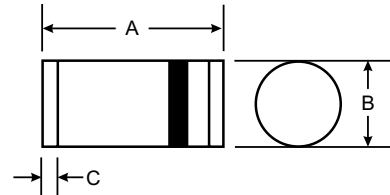
## DL4001 - DL4007



### 1.0A SURFACE MOUNT GLASS PASSIVATED RECTIFIER

#### Features

- Glass Passivated Junction
- High Current Capability
- Low Forward Voltage Drop
- High Reliability and Low Leakage
- For Surface Mount Application
- Plastic Material - UL Flammability Classification Rating 94V-0



#### Mechanical Data

- Case: MELF, Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
- Approx Weight: 0.25 grams
- Mounting Position: Any

MELF		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.60
C	0.55 Nominal	
All Dimensions in mm		

#### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	DL 4001	DL 4002	DL 4003	DL 4004	DL 4005	DL 4006	DL 4007	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	71	141	283	424	566	707	V
Maximum Average Forward Rectified Current @ Terminal Temp @ T <sub>T</sub> = 75°C	I <sub>O</sub>	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30							A
Maximum Forward Voltage @ I <sub>F</sub> = 1.0A	V <sub>F</sub>	1.1							V
Maximum dc Reverse Current @ T <sub>A</sub> = 25°C Rated DC Blocking Voltage @ T <sub>A</sub> = 100°C	I <sub>R</sub>	5.0 50							μA
Typical Thermal Resistance, Junction to Ambient Air	R <sub>θJA</sub>	50							K/W
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	15							pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.



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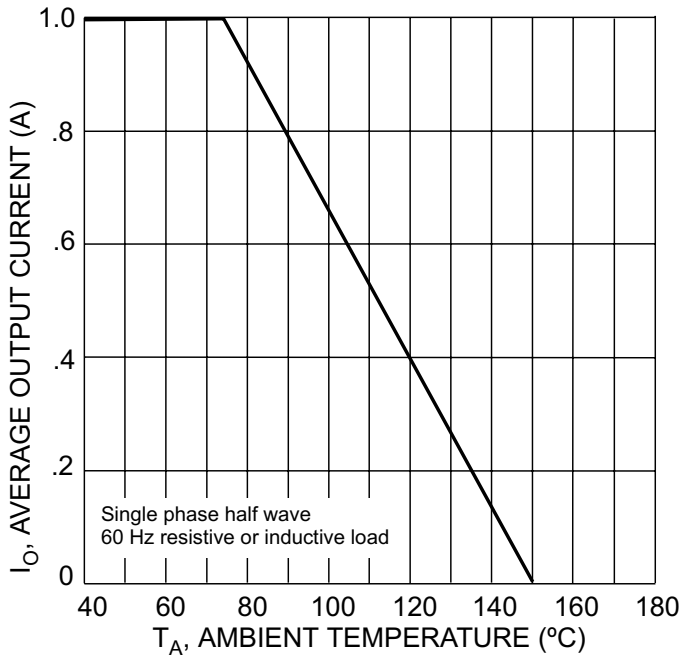


Fig. 1 Forward Current Derating Curve

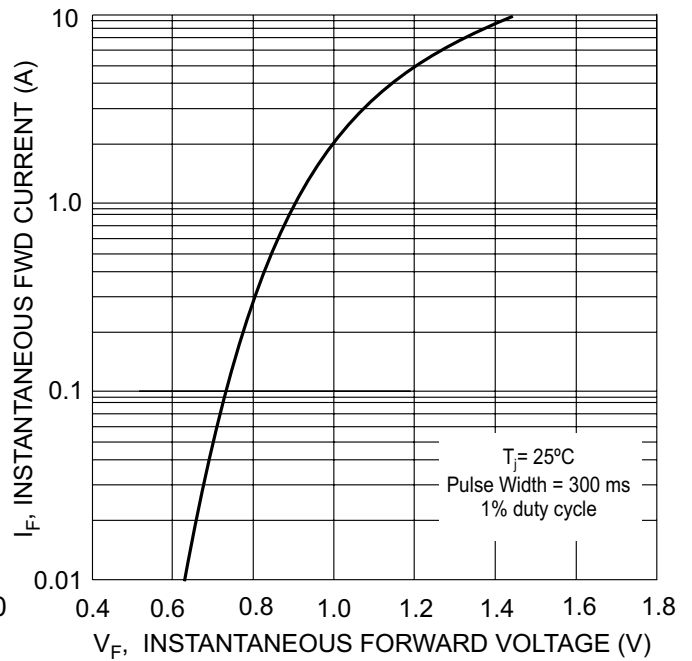


Fig. 2 Typical Forward Characteristics

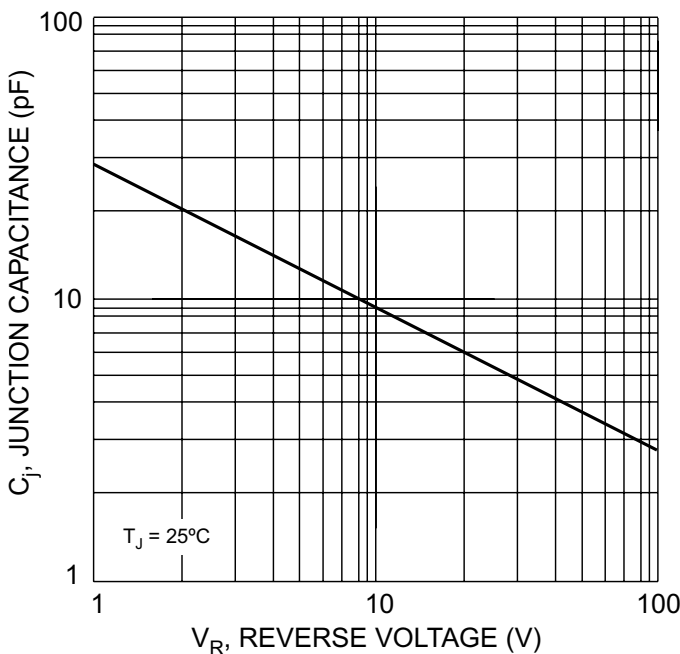


Fig. 3 Typical Junction Capacitance

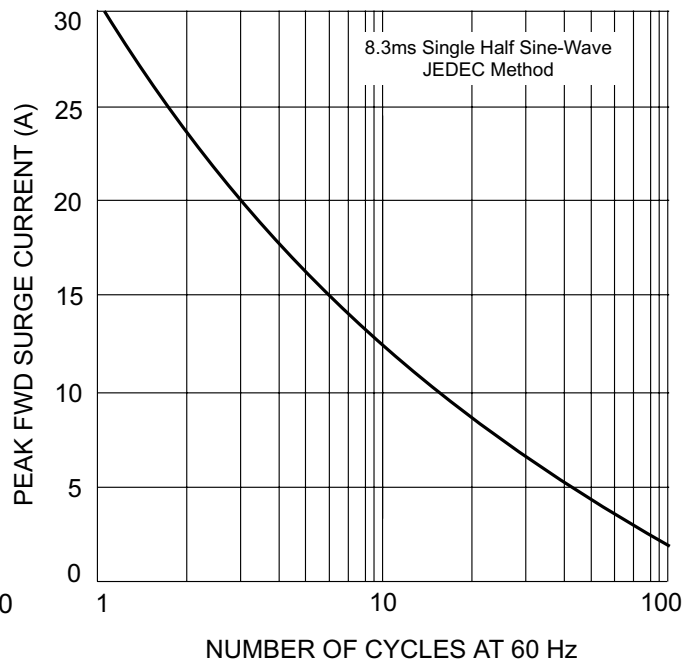


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current