



# DL4001 THRU DL4007

## SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage - 50 to 1000 Volts    Forward Current - 1.0 Ampere

### FEATURES

- Ideal for surface mounted applications
- Low leakage current
- Glass passivated junction

### MECHANICAL DATA

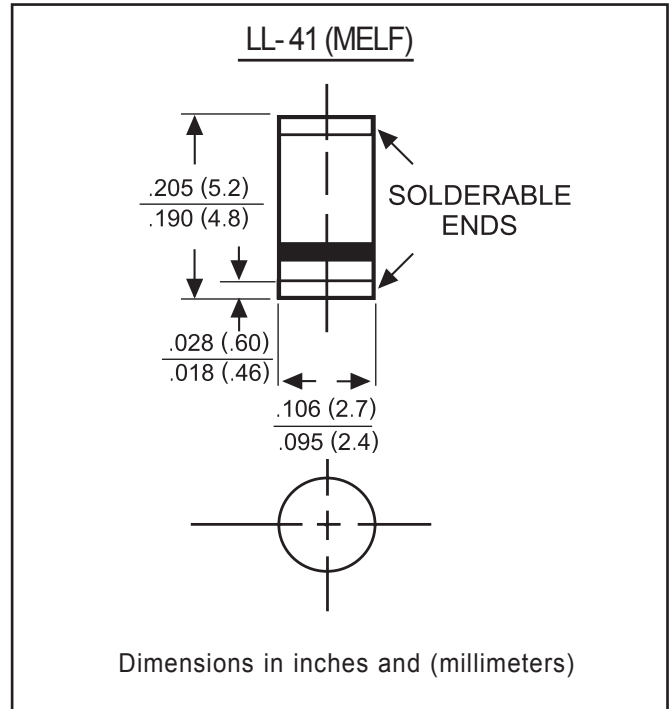
**Case:** Molded plastic

**EPOXY:** UL 94V-0 rate flame retardant

**Terminals :** Solder plated solderable per MIL-STD-202E, Method 208 guaranteed

**Mounting Position:** Any

**Weight :** 0.12 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	SYMBOL	DL4001	DL4002	DL4003	DL4004	DL4005	DL4006	DL4007	UNITS	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current T <sub>A</sub> = 75°C	I <sub>O</sub>	1.0							A	
Peak Forward Surge Current I <sub>FM</sub> (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30							A	
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V	
Maximum DC Reverse Current at	I <sub>R</sub>	@ T <sub>A</sub> = 25°C	5.0							μA
Rated DC Blocking Voltage		@ T <sub>A</sub> = 125°C	50							
Maximum Thermal Resistance (Note 2)	R <sub>θJL</sub>	20							°C/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 1.0 MHz and applied reverse voltage of 4.0VDC

2. Thermal resistance (Junction to Ambient), .24in<sup>2</sup> (6.0mm<sup>2</sup>) copper pads to each terminal.



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## RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

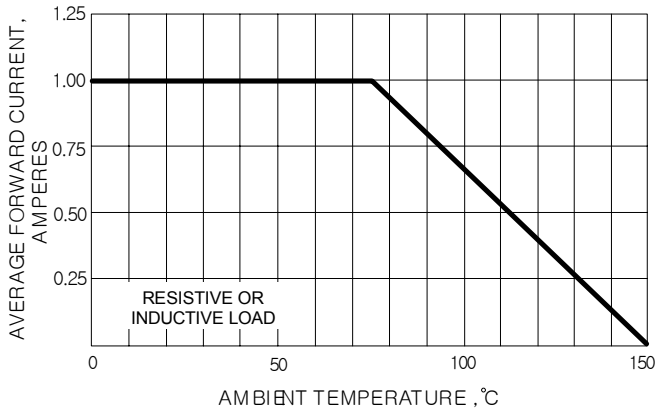


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

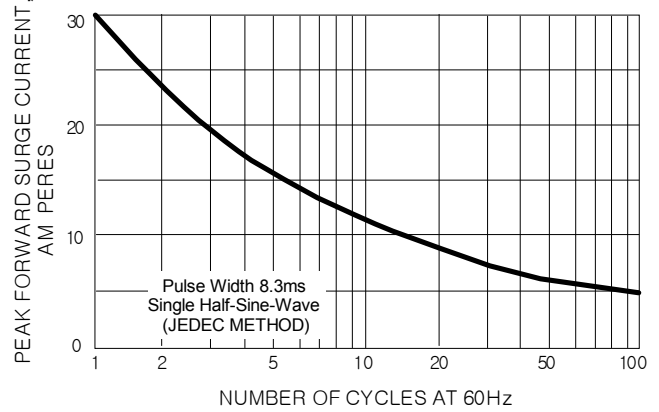


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

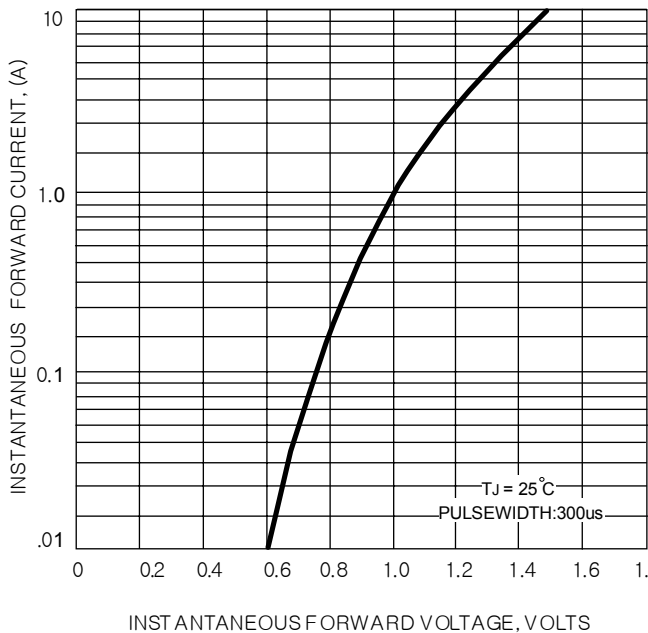


FIG.4 - TYPICAL JUNCTION CAPACITANCE

