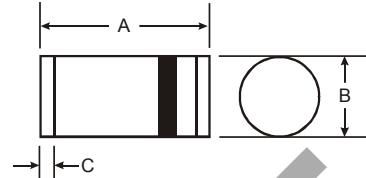


## Features

- Glass Passivated Junction
- High Current Capability
- Low Forward Voltage Drop
- Low Leakage Current
- Lead Free Finish/RoHS Compliant Version (Note 2)

## Mechanical Data

- Case: MELF
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Solderable per MIL-STD-202, Method 208 (e3)
- Lead Free Plating (Matte Tin Finish).
- Polarity: Cathode Band
- Marking: Cathode Band Only
- Approximate Weight: 0.25 grams



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

 @ $T_A = 25^\circ\text{C}$  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	$V_{RRM}$								
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	71	141	283	424	566	707	V
Average Forward Rectified Current @ $T_T = 75^\circ\text{C}$	$I_O$					1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on Rated Load	$I_{FSM}$					30			A
Maximum Forward Voltage @ $I_F = 1.0\text{A}$	$V_{FM}$					1.1			V
Maximum DC Reverse Current @ Rated DC Blocking Voltage	$I_{RM}$					5.0			$\mu\text{A}$
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$						50			
Typical Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$				50				$^\circ\text{C/W}$
Typical Total Capacitance (Note 1)	$C_T$				15				pF
Operating and Storage Temperature Range	$T_j, T_{STG}$				-55 to +150				$^\circ\text{C}$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.
2. RoHS revision 13.2.2003. Glass and high temperature solder exemptions applied, see EU Directive Annex Notes 5 and 7.

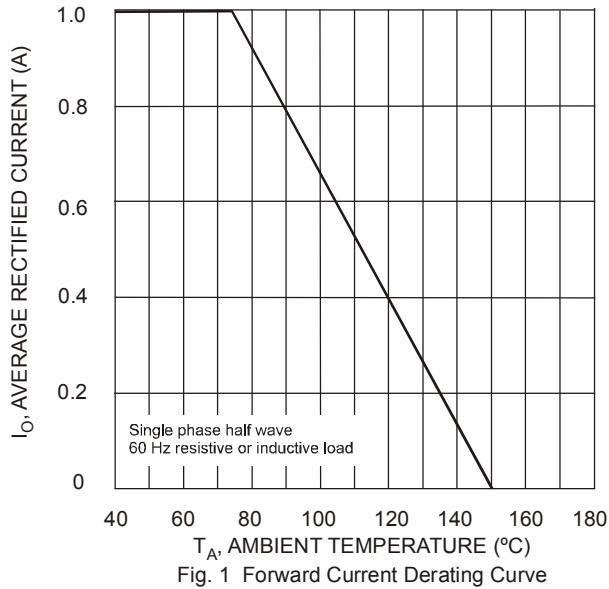


Fig. 1 Forward Current Derating Curve

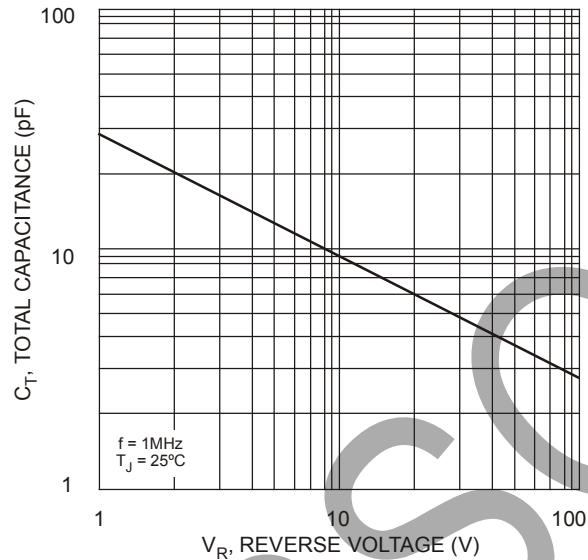


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

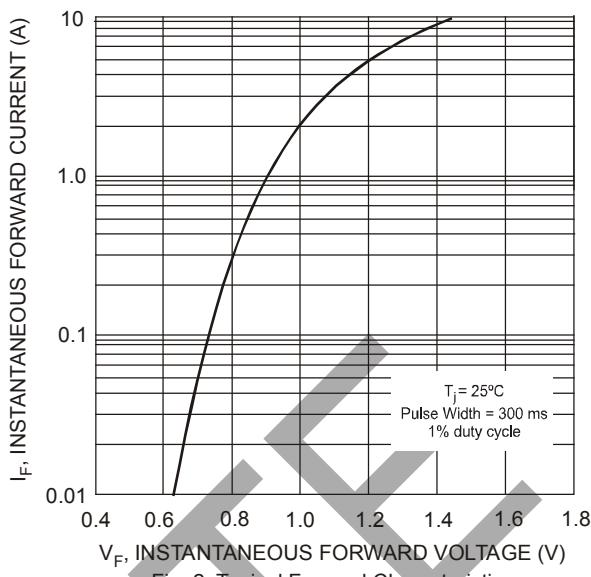


Fig. 2 Typical Forward Characteristics

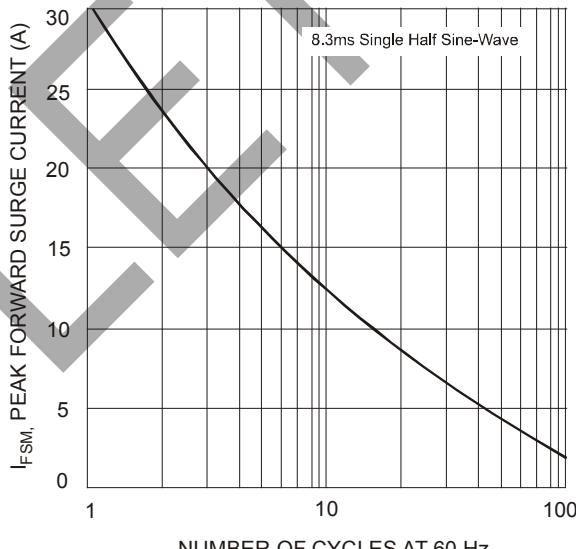


Fig. 4 Max Non-Repetitive Peak Forward Surge Current

## Ordering Information

Device	Packaging	Shipping
DL4001-13-F	MELF	5,000/Tape & Reel
DL4002-13-F	MELF	5,000/Tape & Reel
DL4003-13-F	MELF	5,000/Tape & Reel
DL4004-13-F	MELF	5,000/Tape & Reel
DL4005-13-F	MELF	5,000/Tape & Reel
DL4006-13-F	MELF	5,000/Tape & Reel
DL4007-13-F	MELF	5,000/Tape & Reel

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