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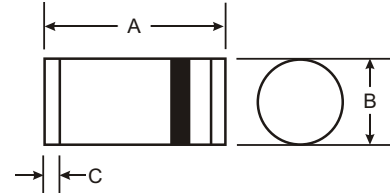
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Jameco Part Number 1540164

### 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	2.60	2.64
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 Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	71	141	283	424	566	707	V
Average Forward Rectified Current @ $T_J = 75^\circ\text{C}$	$I_O$	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 @ $T_A = 25^\circ\text{C}$ @ Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	5.0 50							A
Typical Thermal Resistance, Junction to Ambient Air	$R_{JA}$	50							C/W
Typical Total Capacitance (Note 1)	$C_T$	15							pF
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							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*.

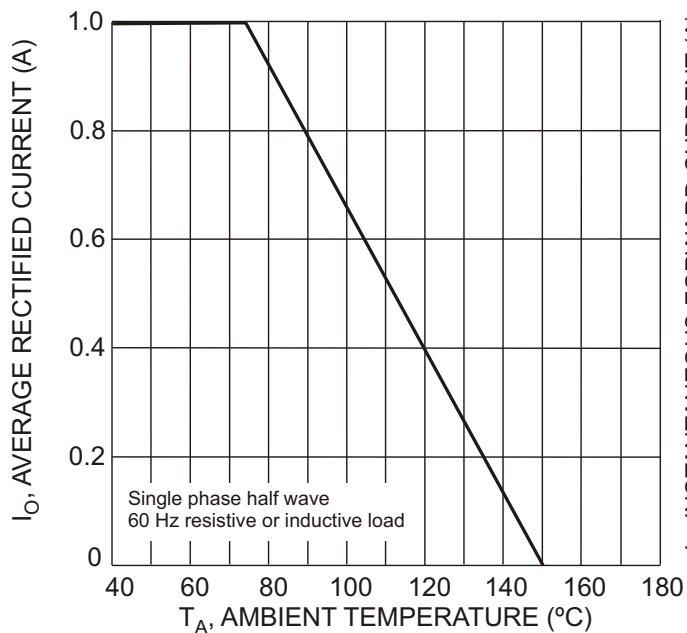


Fig. 1 Forward Current Derating Curve

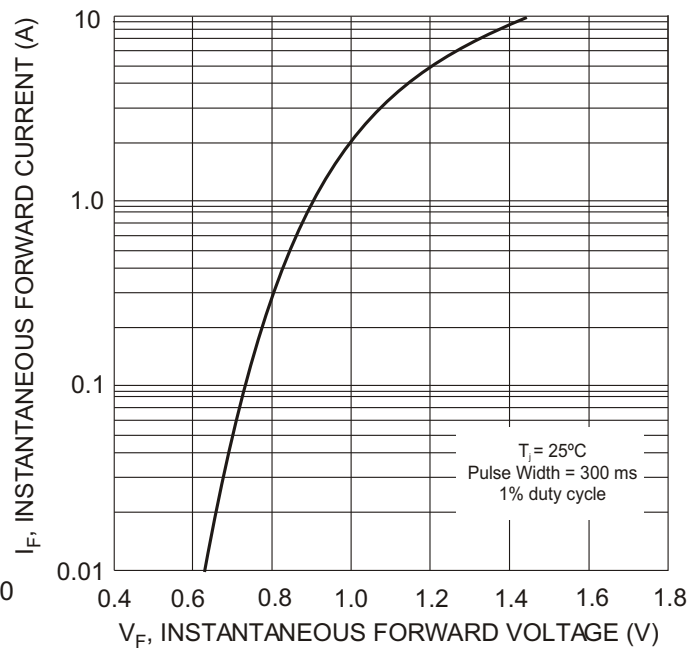


Fig. 2 Typical Forward Characteristics

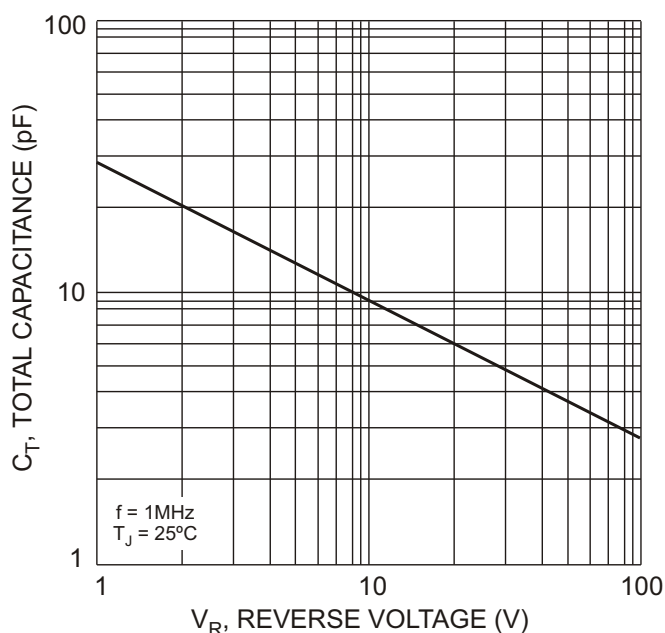


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

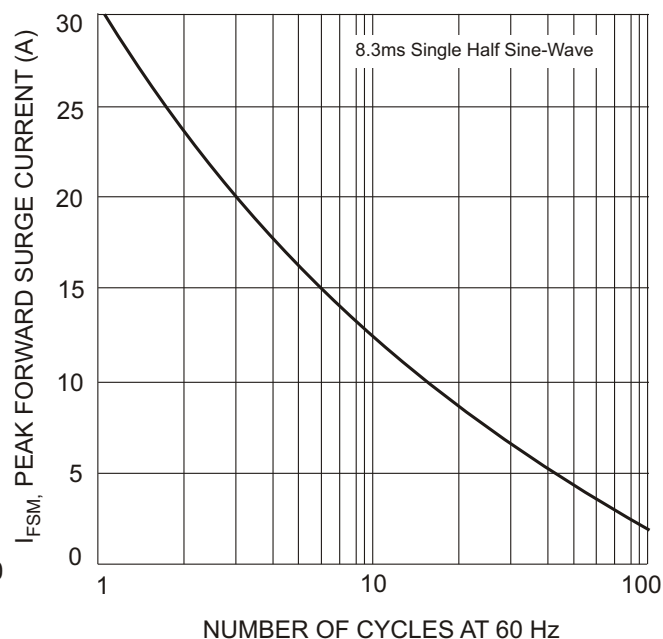


Fig. 4 Max Non-Repetitive Peak Forward Surge Current

## 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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