

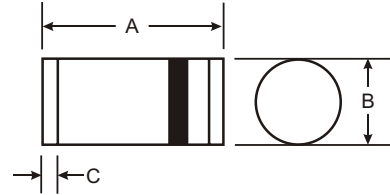


**THE DATASHEET OF  
DL4003-13-F**



### 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 @ $T_A = 25^\circ\text{C}$ 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
Maximum Average Forward Rectified Current @ Terminal Temp @ $T_T = 75^\circ\text{C}$	$I_O$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30							A
Maximum Forward Voltage @ $I_F = 1.0\text{A}$	$V_F$	1.1							V
Maximum dc Reverse Current @ $T_A = 25^\circ\text{C}$ Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_R$	5.0 50							$\mu\text{A}$
Typical Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	50							K/W
Typical Junction Capacitance (Note 1)	$C_j$	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.

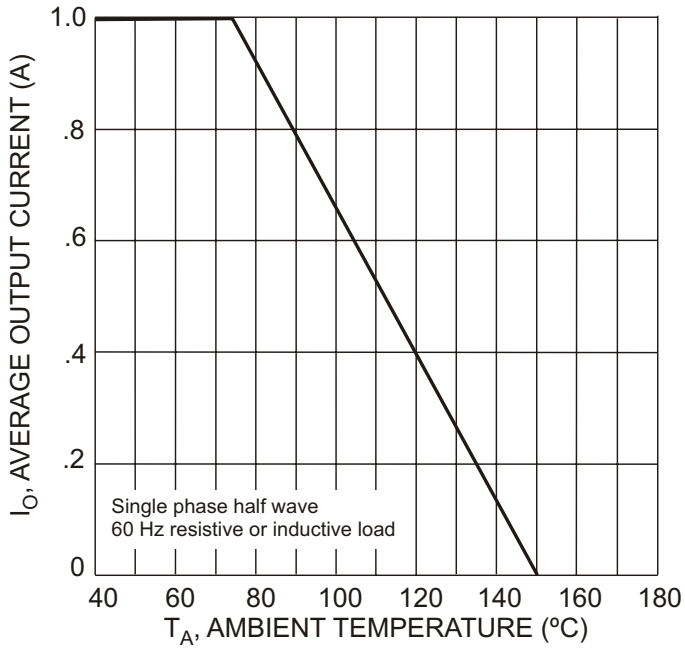


Fig. 1 Forward Current Derating Curve

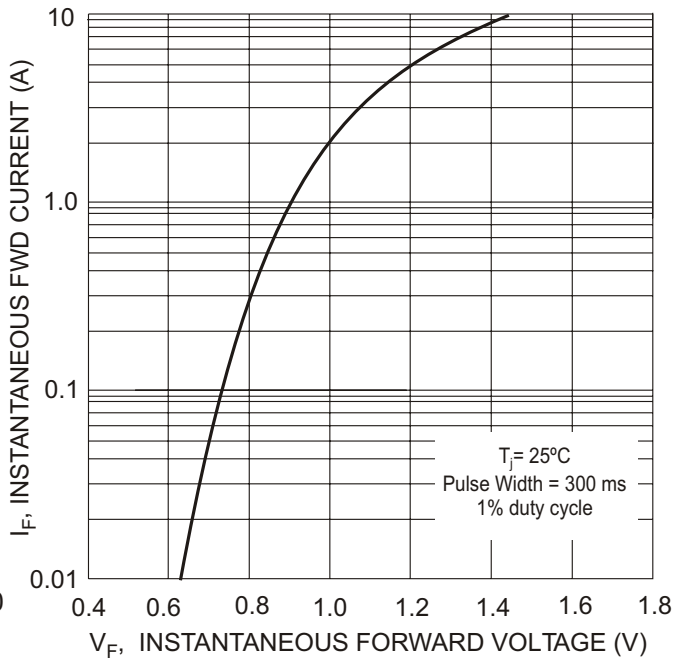


Fig. 2 Typical Forward Characteristics

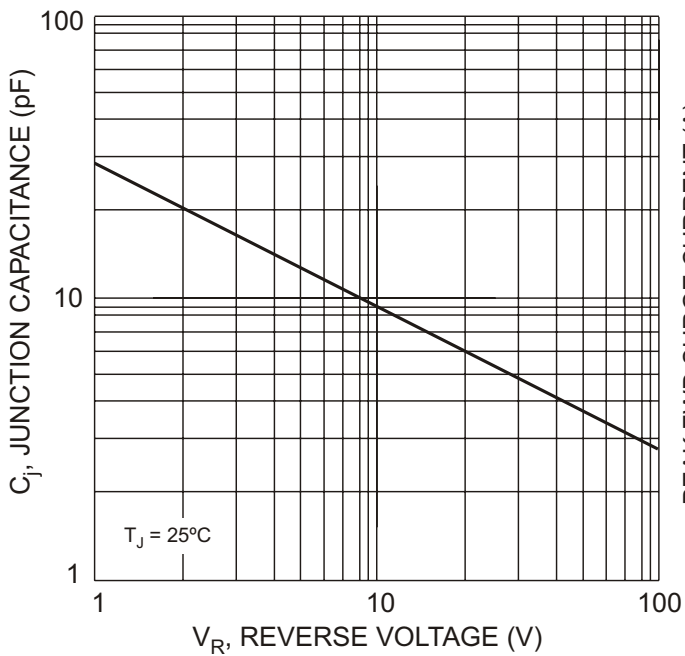


Fig. 3 Typical Junction Capacitance

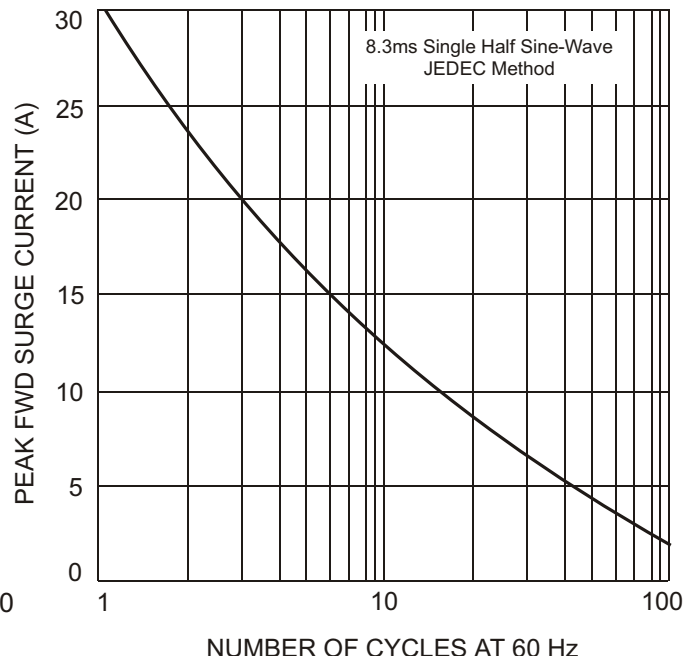


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current

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