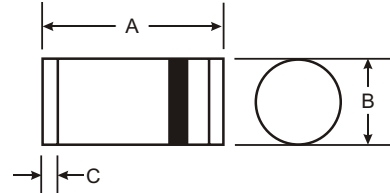


Features

- Glass Passivated Junction
- High Current Capability
- Low Forward Voltage Drop
- Low Leakage Current
- Available in 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
- Also Available in Lead Free Plating (Matte Tin Finish). Please see Ordering Information, Note 3, on Page 2
- Polarity: Cathode Band
- Approx Weight: 0.25 grams
- Marking: Cathode Band Only

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°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 _T = 75°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 = 1.0A	V _{FM}	1.1							V
Maximum DC Reverse Current @ Rated DC Blocking Voltage	I _{RM}	5.0 50							μA
Typical Thermal Resistance, Junction to Ambient Air	R _{θJA}	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.

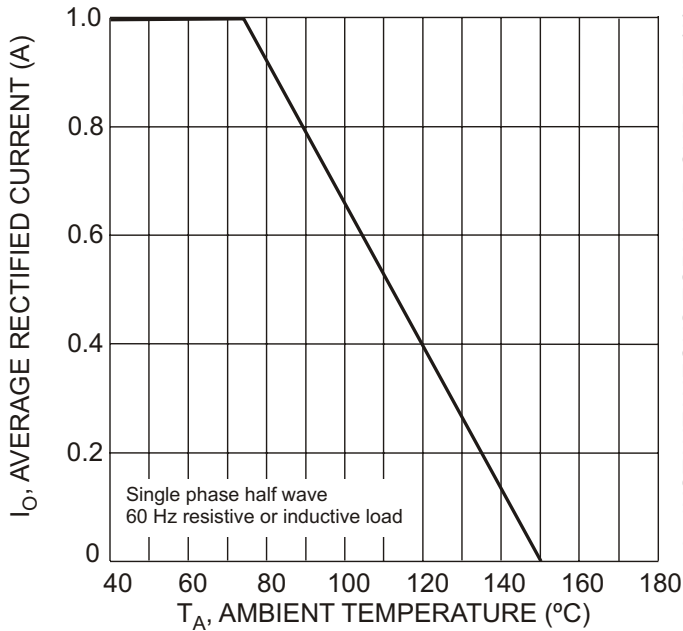


Fig. 1 Forward Current Derating Curve

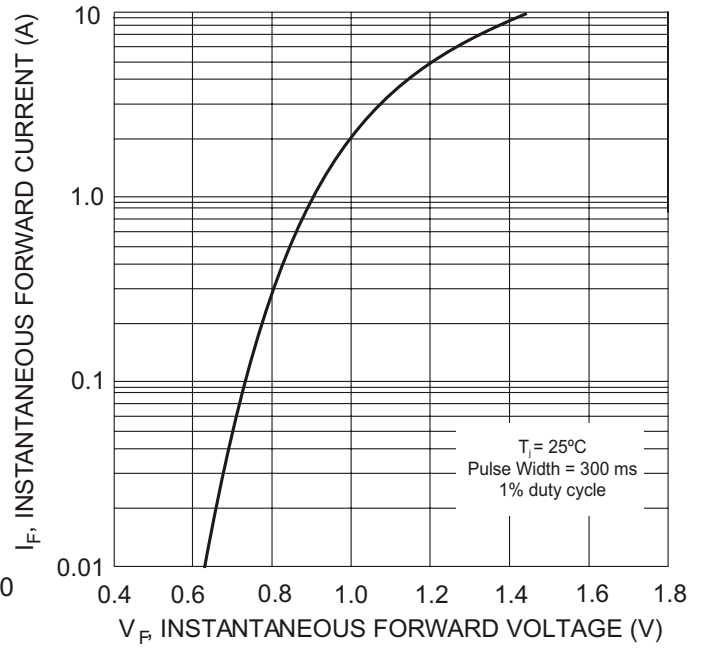


Fig. 2 Typical Forward Characteristics

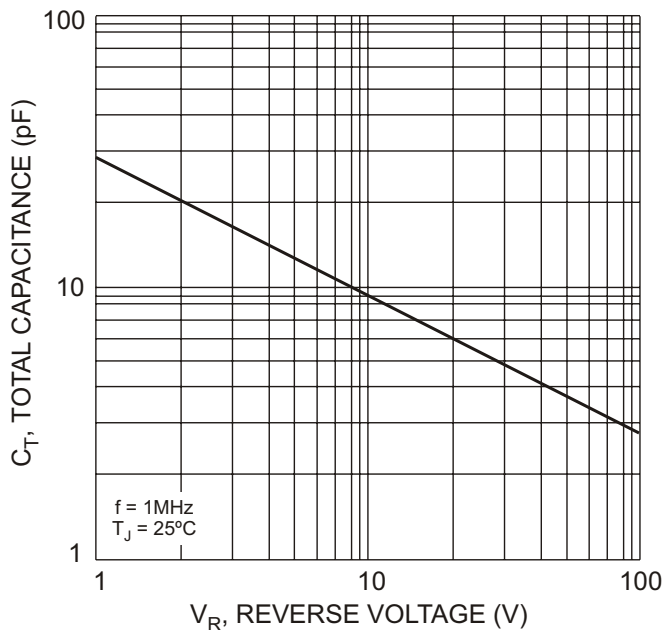


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

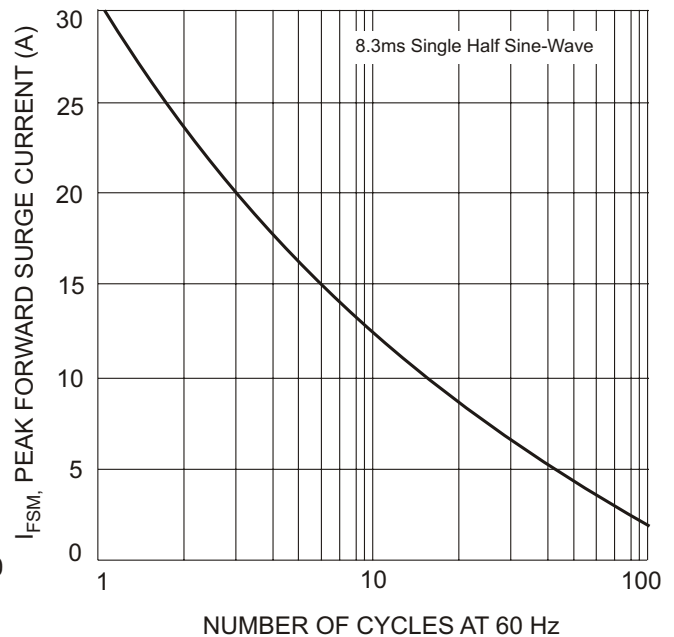


Fig. 4 Max Non-Repetitive Peak Forward Surge Current

Ordering Information (Note 3)

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

Note: 3. For Lead Free Finish/RoHS Compliant version part number, please add "-F" suffix to the part number above.
Example: DL4005-13-F.