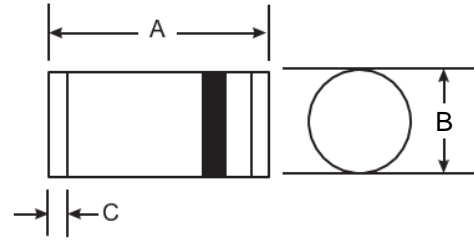


1.0A SURFACE MOUNT FAST RECOVERY RECTIFIER

OBSOLETE - PART DISCONTINUED

Features

- Glass Passivated Junction
- Low Leakage Current
- Low Forward Voltage Drop
- High Current Capability
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please [contact us](#) or your local Diodes representative. <https://www.diodes.com/quality/product-definitions/>**



MELF		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.60
C	0.55 Nominal	
All Dimensions in mm		

Mechanical Data

- Case: MELF
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Lead Free Plating (Matte Tin Finish).
- Polarity: Cathode Band
- Approx Weight: 0.25 grams
- Marking: Cathode Band Only

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	DL4933	DL4934	DL4935	DL4936	DL4937	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	V
Average Forward Rectified Current @ T _T = 75°C	I _O	1.0					A
Peak Forward Surge Current 8.3 ms half sine-wave superimposed on rated load	I _{FSM}	30					A
Maximum Instantaneous Forward Voltage @ I _F = 1.0A	V _{FM}	1.2					V
Maximum DC Reverse Current at Rated Blocking Voltage	I _{RM}	5.0					µA
Maximum Full Load Reverse Current Full Cycle Average @ T _T = 55°C	I _R	100					µA
Maximum Reverse Recovery Time (Note 3)	t _{rr}	200					ns
Typical Total Capacitance (Note 4)	C _T	15					pF
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150					°C

- Notes:
1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.
 2. See http://www.diodes.com/quality/lead_free.html for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
 3. Reverse Recovery Test Conditions: I_F = 1.0A, V_R = 30V, di/dt = 50A/µS.
 4. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V.

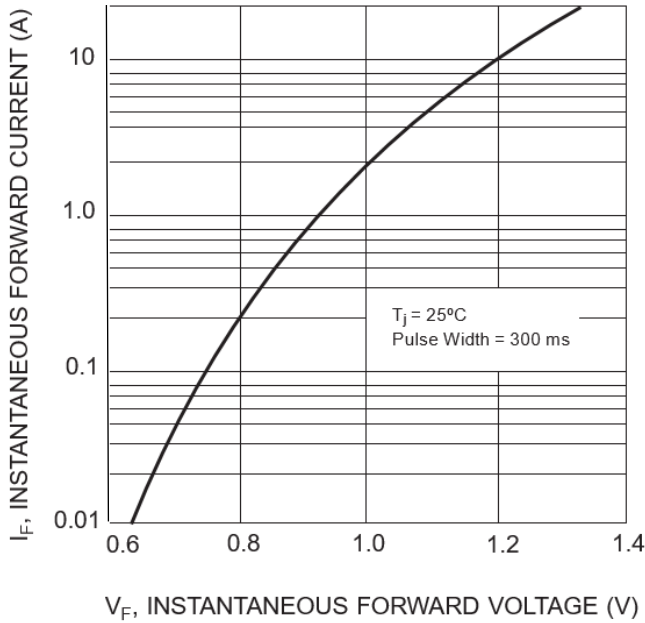


Fig. 1 Typical Forward Characteristics

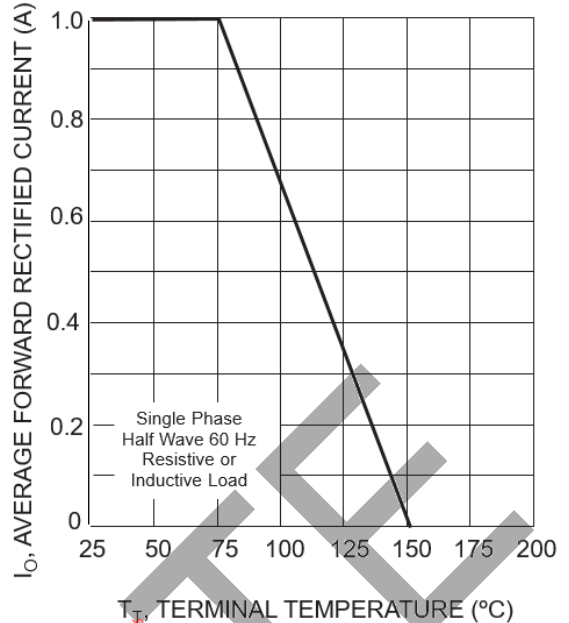


Fig. 2 Forward Derating Curve

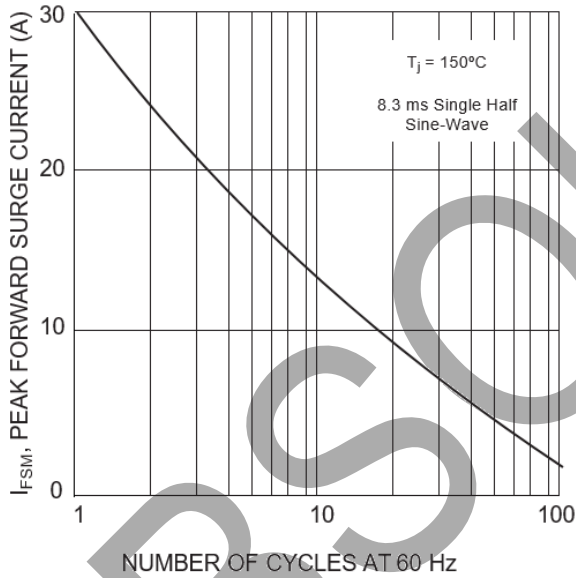


Fig. 3 Peak Fwd Surge Current vs Number of Cycles at 60Hz

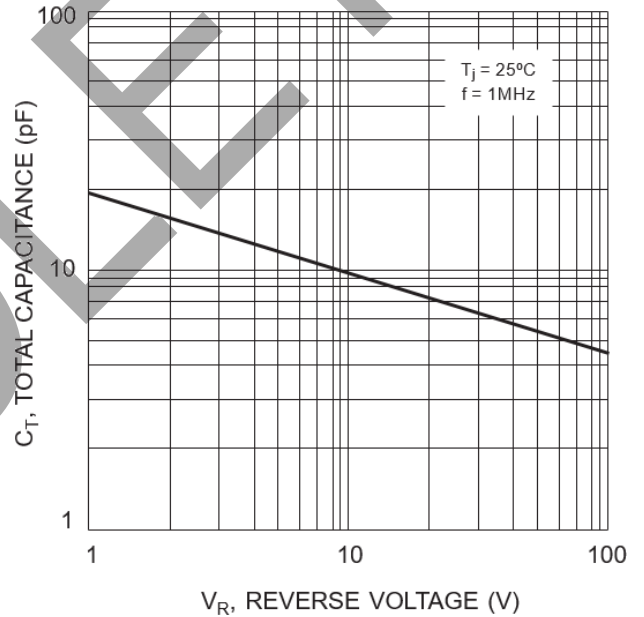


Fig. 4 Typical Total Capacitance vs Reverse Voltage

Ordering Information (Note 5)

Device	Packaging	Shipping
DL4933-13-F	MELF	5,000/Tape & Reel
DL4934-13-F	MELF	5,000/Tape & Reel
DL4935-13-F	MELF	5,000/Tape & Reel
DL4936-13-F	MELF	5,000/Tape & Reel
DL4937-13-F	MELF	5,000/Tape & Reel

Note 5. For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.

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