

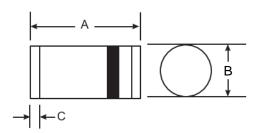


DL4933 - DL4937

1.0A SURFACE MOUNT FAST RECOVERY RECTIFIER

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 <u>contact us</u> or your local Diodes representative. https://www.diodes.com/quality/product-definitions/



MELF							
Dim	Min	Max					
Α	4.80	5.20					
В	2.40	2.60					
С	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 @ TA = 25°C unless otherwise specified

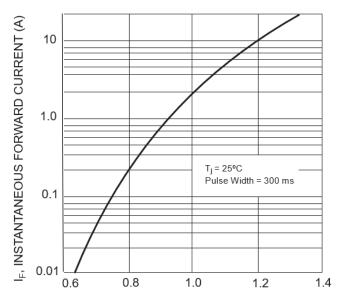
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

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	٧
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	V
Average Forward Rectified Current @ T _T = 75°C		1.0					Α
Peak Forward Surge Current 8.3 ms half sine-wave superimposed on rated load		30					А
Maximum Instantaneous Forward Voltage @ IF = 1.0A		1.2					٧
Maximum DC Reverse Current at Rated Blocking Voltage		5.0					μA
Maximum Full Load Reverse Current Full Cycle Average @ T _T = 55°C		100				μΑ	
Maximum Reverse Recovery Time (Note 3)		200				ns	
Typical Total Capacitance (Note 4)		15				pF	
Operating and Storage Temperature Range		-65 to +150				°C	

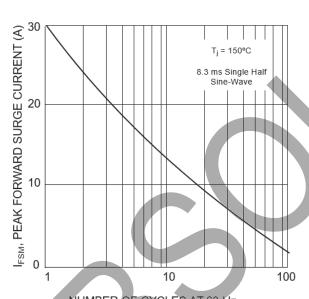
Notes:

- 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: IF = 1.0A, VR = 30V, di/dt =50A/ μ S.
- 4. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V.

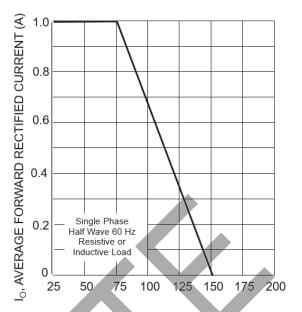




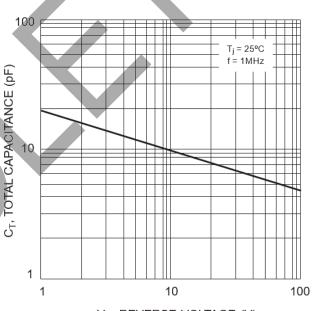
V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 1 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Peak Fwd Surge Current vs Number of Cycles at 60Hz



T_I, TERMINAL TEMPERATURE (°C) Fig. 2 Forward Derating Curve



 $\mbox{$V_R$, REVERSE VOLTAGE (V)$} \label{eq:VR}$ 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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