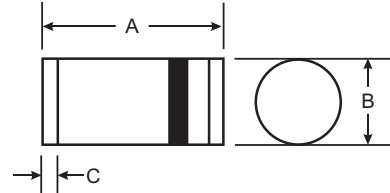


Features

- Glass Passivated Junction
- Low Leakage Current
- Low Forward Voltage Drop
- High Current Capability
- Lead Free Finish/RoHS Compliant (Note 3)**

NOT RECOMMENDED FOR NEW DESIGN
SUGGESTED REPLACEMENT RS1A - RS1J



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

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 @ $T_A = 25\text{ C}$ 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	V_{RRM}						
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	V
DC Blocking Voltage	V_R						
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	V
Average Forward Rectified Current @ $T_T = 75\text{ C}$	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 @ $I_F = 1.0\text{A}$	V_{FM}	1.2					V
Maximum DC Reverse Current at Rated Blocking Voltage	I_{RM}	5.0					A
Maximum Full Load Reverse Current Full Cycle Average @ $T_T = 55\text{ C}$	I_R	100					A
Maximum Reverse Recovery Time (Note 1)	t_{rr}	200					ns
Typical Total Capacitance (Note 2)	C_T	15					pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150					C

- Notes:
1. Reverse Recovery Test Conditions: $I_F = 1.0\text{A}$, $V_R = 30\text{V}$, $di/dt = 50\text{ A/s}$.
 2. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V.
 3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see *EU Directive Annex Notes 5 and 7*.

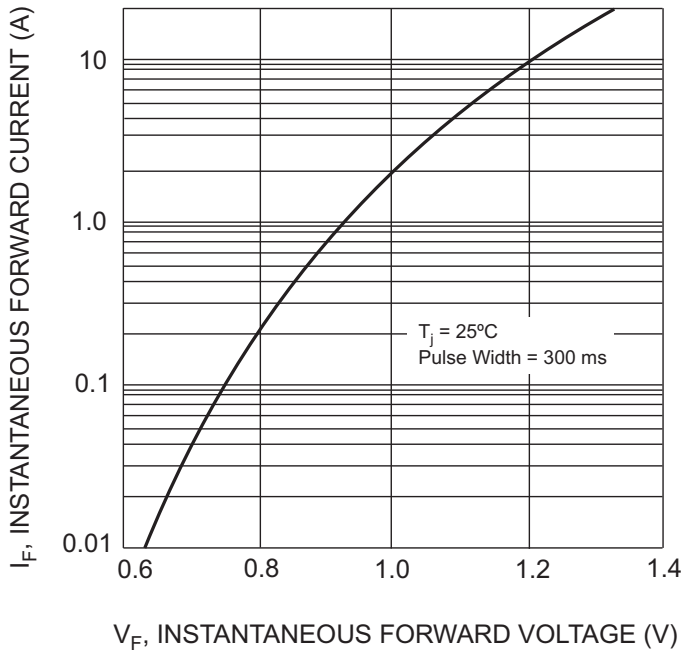


Fig. 1 Typical Forward Characteristics

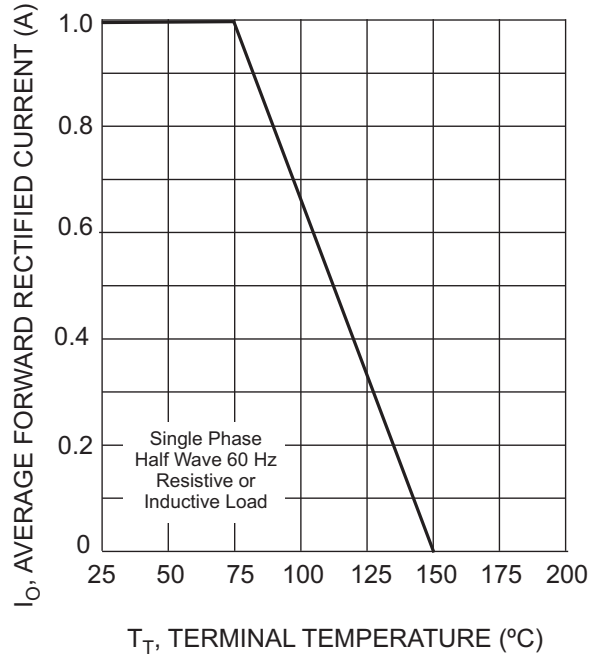


Fig. 2 Forward Derating Curve

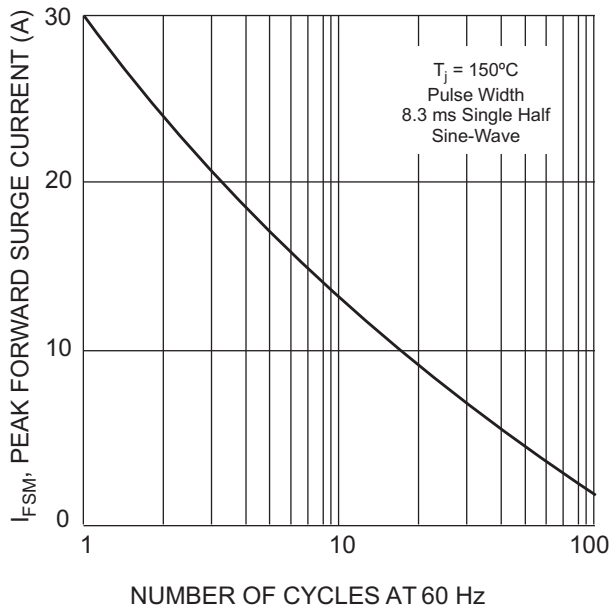


Fig. 3 Peak Fwd Surge Current vs Number of Cycles at 60 Hz

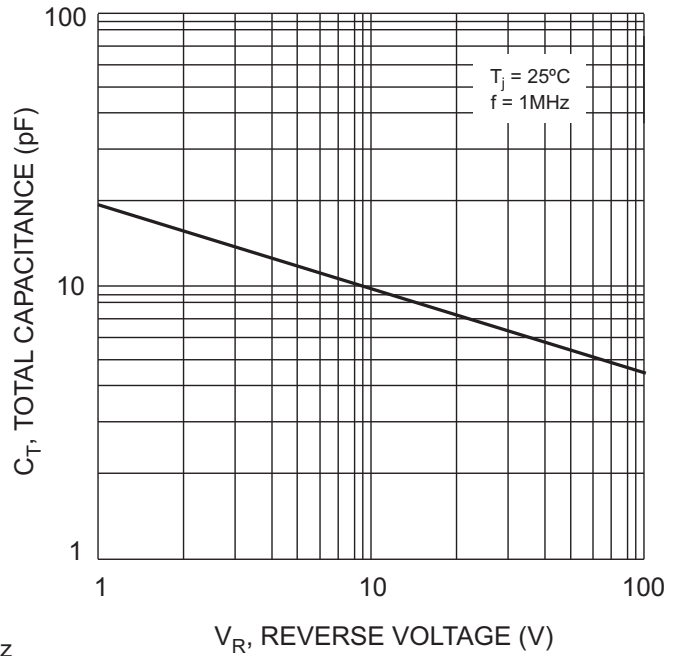


Fig. 4 Typical Total Capacitance vs Reverse Voltage

Ordering Information

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

IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.