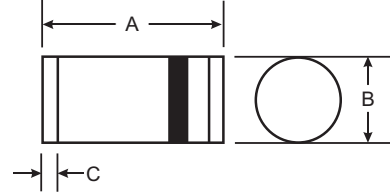


### Features

- 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 @ $T_T = 75^\circ\text{C}$	$I_O$	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*.

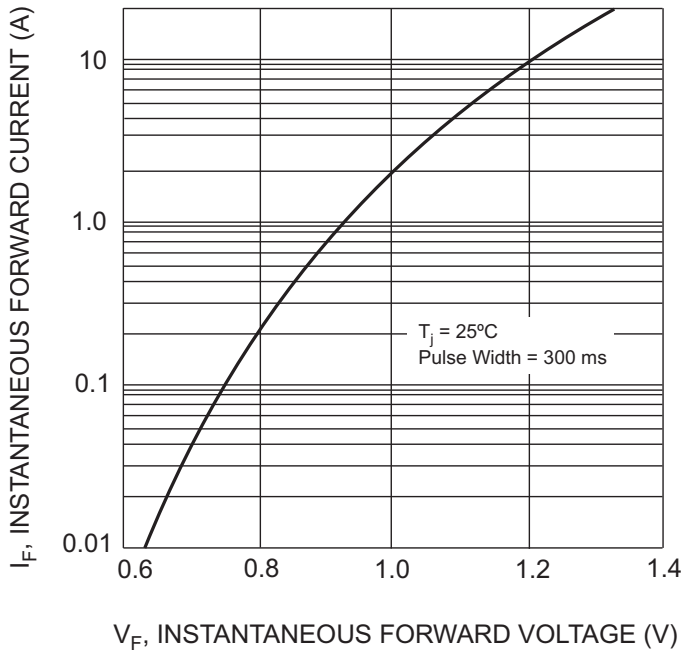


Fig. 1 Typical Forward Characteristics

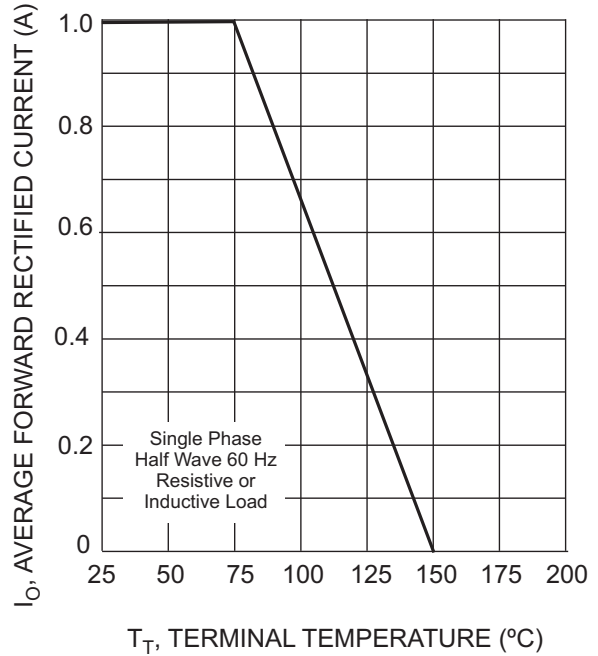


Fig. 2 Forward Derating Curve

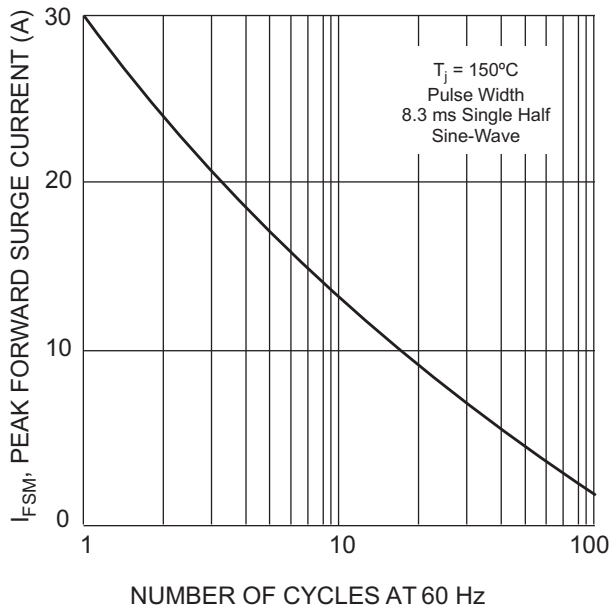


Fig. 3 Peak Fwd Surge Current vs Number of Cycles at 60 Hz

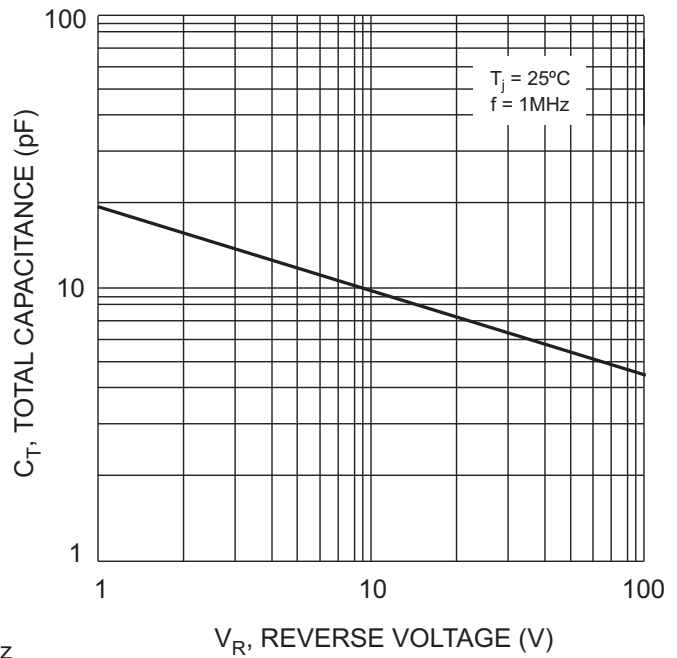


Fig. 4 Typical Total Capacitance vs Reverse Voltage

### 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

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