



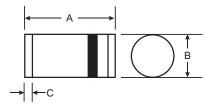
## 1.0A SURFACE MOUNT FAST RECOVERY RECTIFIER

### **Features**

- NOT RECOMMENDED FOR NEW DESIGN SUGGESTED REPLACEMENT RS1A - RS1J \_

Glass Passivated Junction Low Leakage Current Low Forward Voltage Drop **High Current Capability** 

Lead Free Finish/RoHS Compliant (Note 3)



## **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			
Α	4.80	5.20			
В	2.40	2.60			
С	0.55 Nominal				
All Dimensions in mm					

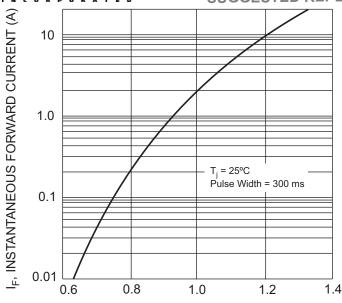
## Maximum Ratings and Electrical Characteristics @ TA = 25 C unless otherwise specified

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

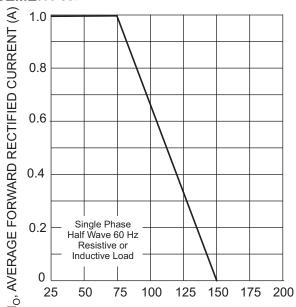
Characteristic	Symbol	DL4933	DL4934	DL4935	DL4936	DL4937	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	V
Average Forward Rectified Current @ T <sub>T</sub> = 75°C		1.0					Α
Peak Forward Surge Current 8.3 ms half sine-wave superimposed on rated load		30				Α	
Maximum Instantaneous Forward Voltage @ I <sub>F</sub> = 1.0A		1.2				V	
Maximum DC Reverse Current at Rated Blocking Voltage		5.0					Α
Maximum Full Load Reverse Current Full Cycle Average @ T <sub>T</sub> = 55 C		100			А		
Maximum Reverse Recovery Time (Note 1)		200				ns	
Typical Total Capacitance (Note 2)		15			pF		
Operating and Storage Temperature Range		-65 to +150			С		

Notes:

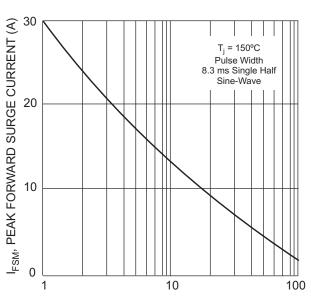
- 1. Reverse Recovery Test Conditions:  $I_F = 1.0A$ ,  $V_R = 30V$ , di/dt = 50 A/s.
- 2. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V.
- 3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 1 Typical Forward Characteristics



T<sub>T</sub>, TERMINAL TEMPERATURE (°C) Fig. 2 Forward Derating Curve



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

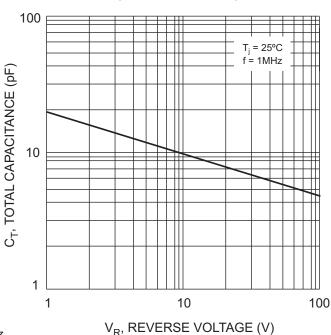


Fig. 4 Typical Total Capacitance vs Reverse Voltage

## **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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