DL4933 - DL4937

1.0A SURFACE MOUNT FAST RECOVERY RECTIFIER

NOT RECOMMENDED FOR NEW DESIGN
SUGGESTED REPLACEMENT RS1A - RS1J

Features

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

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					A
Maximum Full Load Reverse Current Full Cycle Average @ T_T = 55 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 =1.0A, 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*.

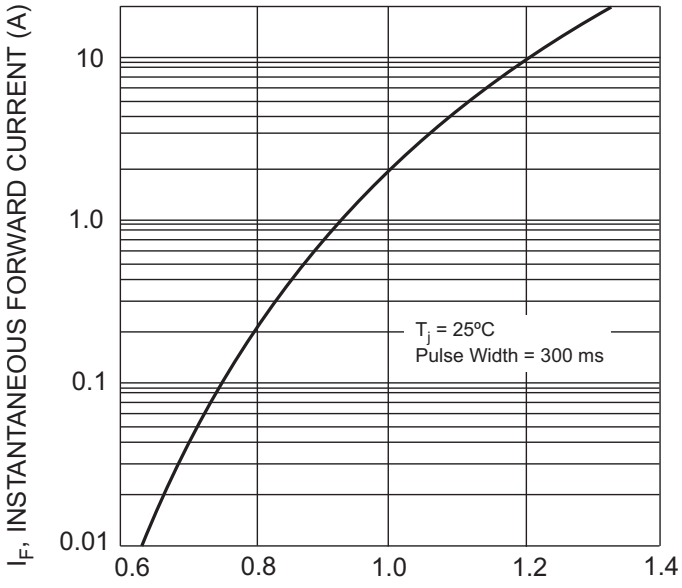

Fig. 1 Typical Forward Characteristics

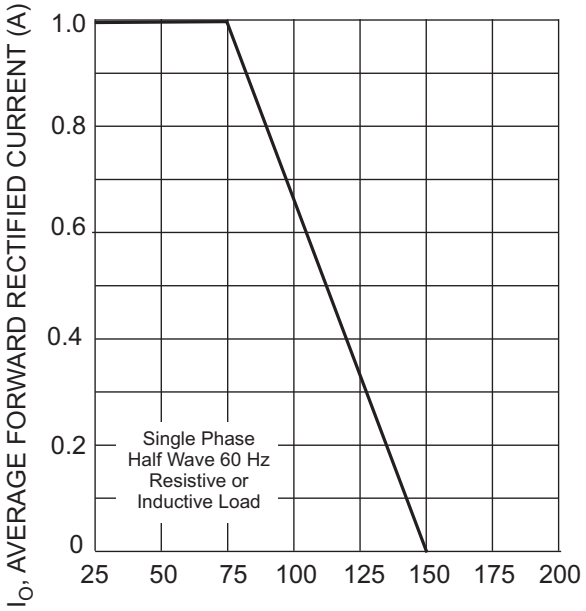

Fig. 2 Forward Derating Curve

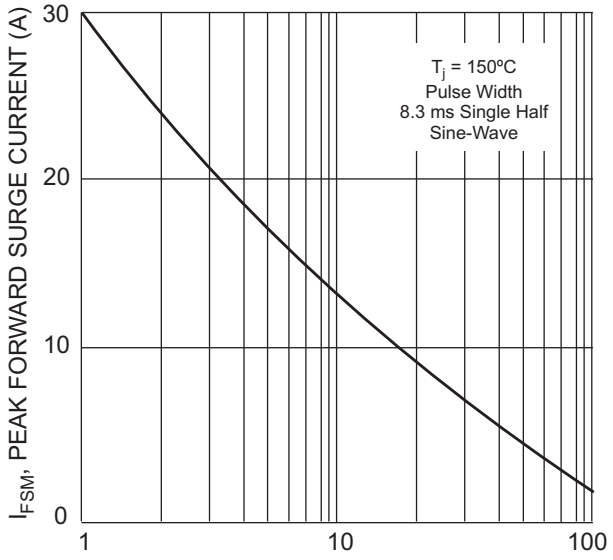

Fig. 3 Peak Fwd Surge Current vs Number of Cycles at 60 Hz

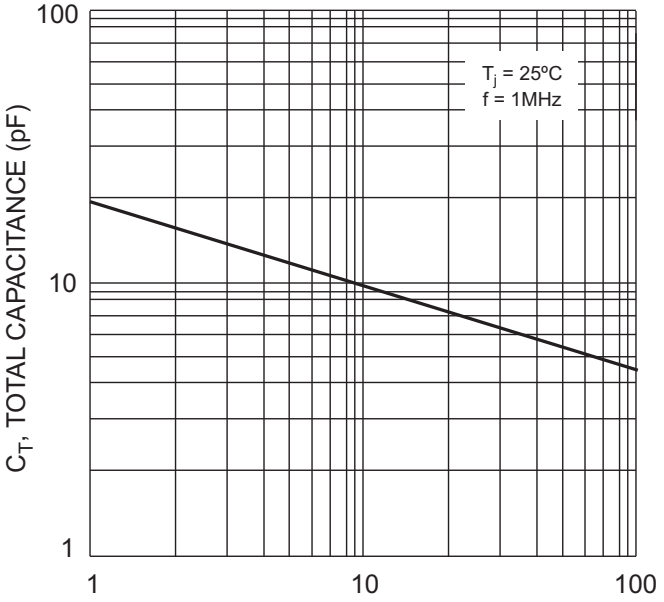

Fig. 4 Typical Total Capacitance vs Reverse Voltage

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