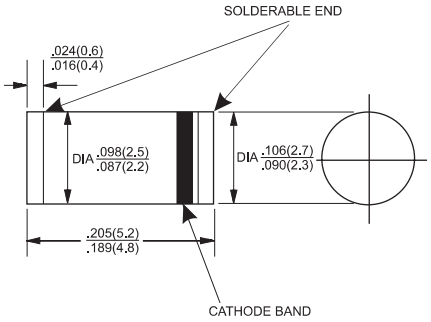
DL4933-DL4937

1.0Ampere Recovery Rectifiers Glass Passivated

MELF



Dimensions in inches and (millimeters)

Features

- Glass Passivated Junction
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- For Surface Mounted Application
- Plastic Material UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: MELF, Plastic
- Polarity: Cathode band
- Approx Weight: 0.25 grams
- Mounting Position: Any
- Marking: Cathode Band Only

Maximum Ratings and Electrical Characteristics

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

Type Number	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
Maximum 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 (JEDEC Method)	I_{FSM}	30					A
Maximum Instantaneous Forward Voltage @ I_F = 1.0A	V_F	1.2					V
Maximum DC Reverse Current at Rated Blocking Voltage	I_R	5.0					μA
Maximum Full Load Reverse Current Full Cycle Average @ T_T = 55°C	I_R	100					μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	200					ns
Typical Junction Capacitance (Note 2)	C_j	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/μs.
2. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V.

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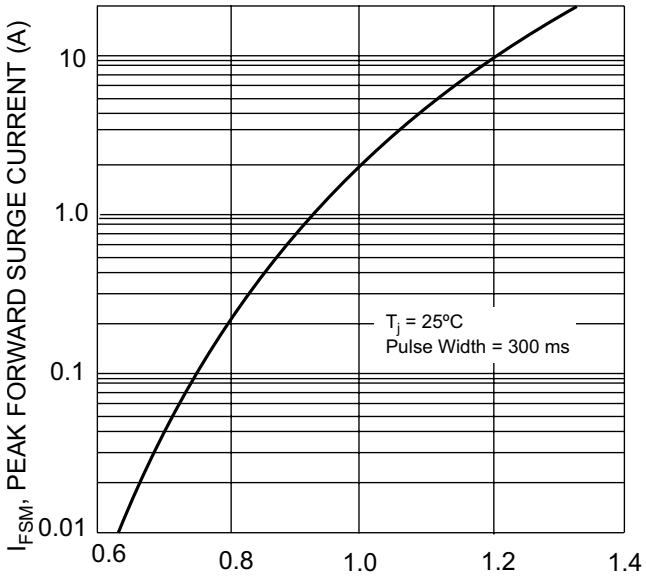
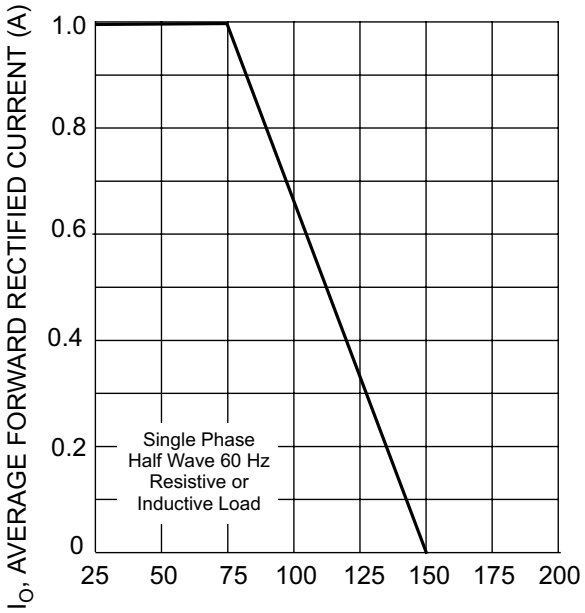


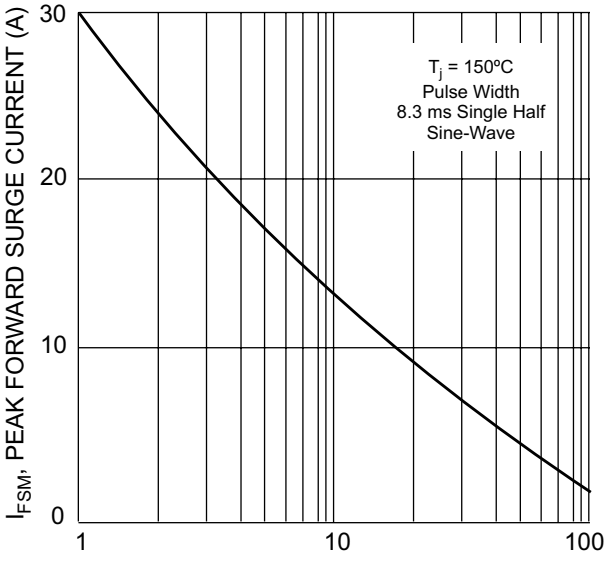
V_F, INSTANTANEOUS FORWARD VOLTAGE (V)

Fig. 1 Peak Forward Surge Current vs Forward Voltage



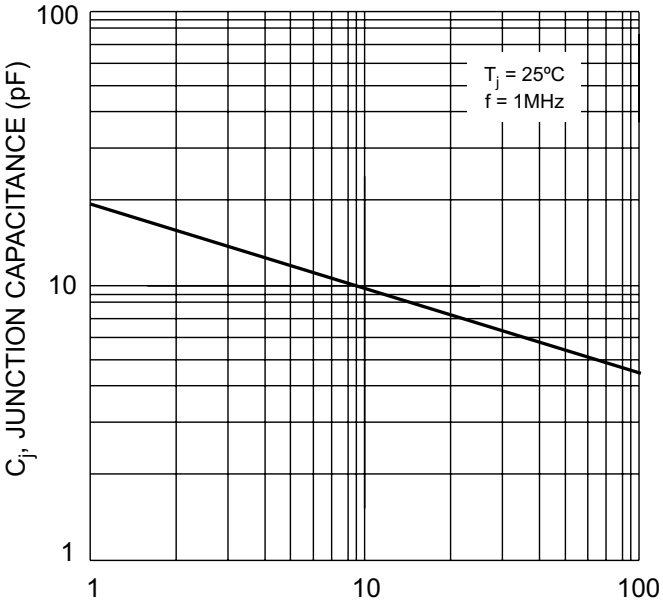
T_T, TERMINAL TEMPERATURE (ºC)

Fig. 2 Forward Derating Curve



NUMBER OF CYCLES AT 60 Hz

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



V_R, REVERSE VOLTAGE (V)

Fig. 4 Junction Capacitance vs Reverse Voltage