

DL4933 - DL4937

Surface Mount Fast Recovery Rectifiers

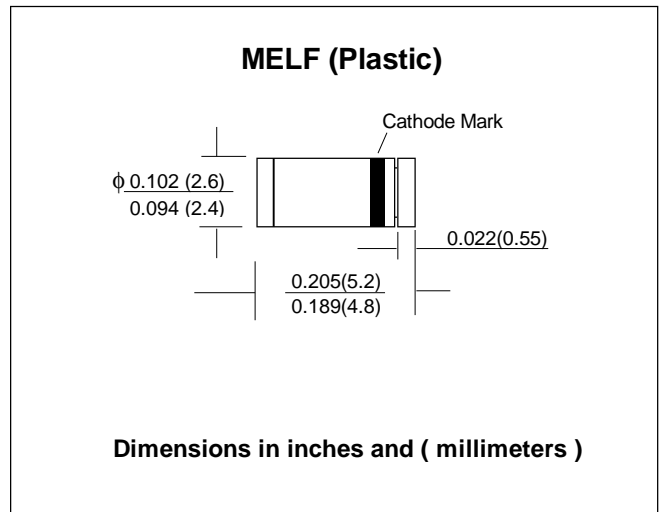
PRV : 50 - 600 Volts
Io : 1.0 Ampere

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : Molded plastic
- * Terminals : Plated Terminals, solderable per MIL-STD-750 Method 2026
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.116 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

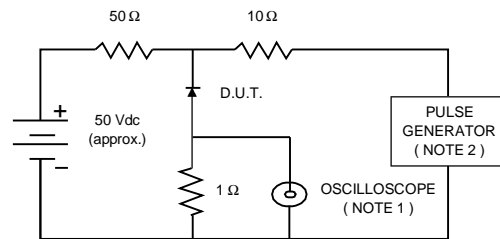
RATING	SYMBOL	DL4933	DL4934	DL4935	DL4936	DL4937	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	V
Maximum Average Forward Current , Ta = 55°C	IF(AV)	1.0					A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	30					A
Maximum Peak Forward Voltage at IF = 1.0 Amp.	VF	1.2					V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	IR	5.0					μA
	IR(H)	100					μA
Maximum Reverse Recovery Time (Note 1)	Trr	150					ns
Typical Junction Capacitance (Note 2)	CJ	15					pf
Junction Temperature Range	TJ	- 65 to + 150					°C
Storage Temperature Range	TSTG	- 65 to + 150					°C

Notes :

- (1) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

RATING AND CHARACTERISTIC CURVES (DL4933 - DL4937)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



- NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
 2. Rise time = 10 ns max., Source Impedance = 50 ohms.
 3. All Resistors = Non-inductive Types.

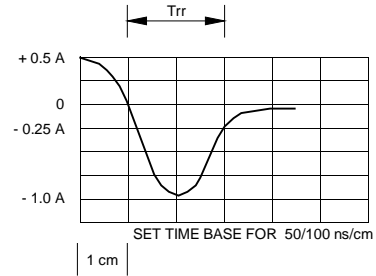


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

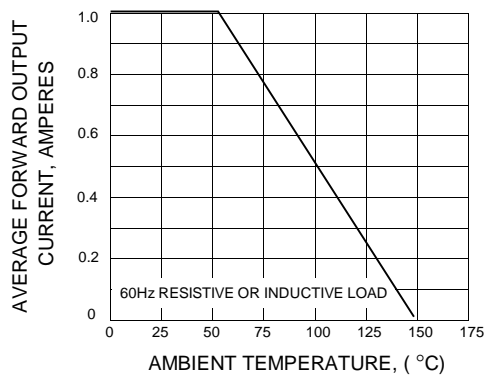


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

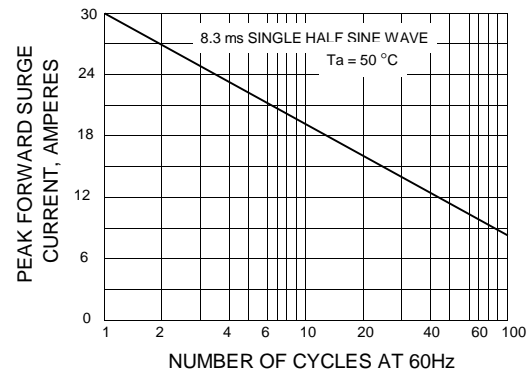


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

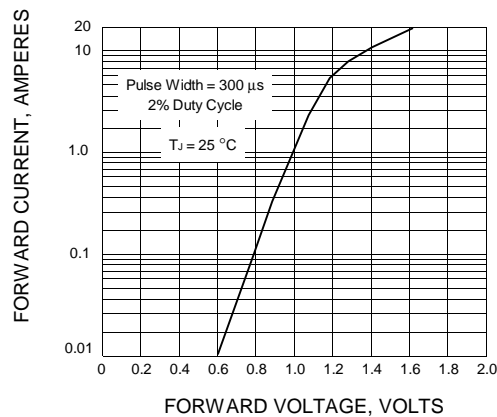


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

