LITE-ON SEMICONDUCTOR

LT2MF SERIES

SURFACE MOUNT UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSORS

STAND-OFF VOLTAGE - **5.0** to **51** Volts
POWER DISSIPATION - **200** WATTS

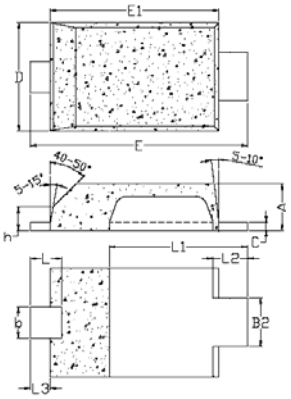
FEATURES

- For surface mounted applications
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has UL flammability classification 94V-O
- Typical IR less than 1uA above 10V
- Fast response time: typically less than 1.0ns
- IEC 61000-4-2,level 4 (ESD), >30KV(air); > 30KV(contact)
- RoHS compliant

MECHANICAL DATA

- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.)
- Terminals: Lead Free Plating (Matte Tin Finish)
- Component in accordance to RoHs 2002/95/EC
- Polarity : Cathode designated by TAB1
- Weight : 10 mg

Mite Flat



ANODE TAB 2 → CATHODE TAB 1

DO-222AA		
DIM.	MIN.	MAX.
A	0.80	0.95
b	0.40	0.65
b2	0.70	1.00
C	0.10	0.25
D	1.75	2.05
E	3.60	3.90
E1	2.80	3.10
h	0.35	0.50
L	0.50	0.80
L1	2.10	2.60
L2	0.45	0.75
L3	0.20	0.50

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOLS	VALUE	UNIT
Peak Power Dissipation at T_J= 25 ℃, T_P =1ms (Note 1)	P_{PK}	Minimum 200	WATTS
Non repetitve Peak Forward Surge Current 8.3ms single half sine-wave @ T_J = 25 ℃	I_{FSM}	25	AMPS.
Operating Temperature Range	T_J	-55 to +175	°C
Storage Temperature Range	T_{STG}	-55 to +175	°C

NOTES : 1. Non-repetitive current pulse, per Fig. 3 and derated above T_J= 25 ℃ per Fig.2.

FIG.1 - PEAK PULSE POWER DERATING CURVE

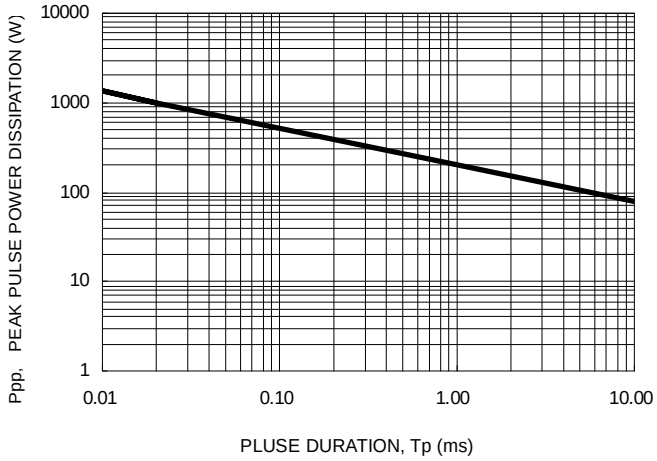


FIG.2 - PEAK PULSE POWER DERATING CURVE

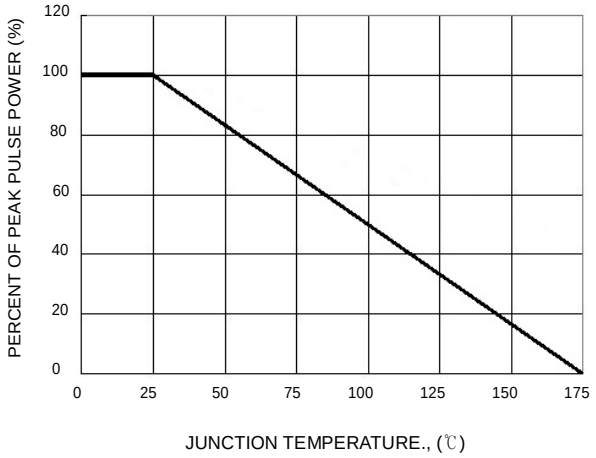


FIG.3 - PULSE WAVEFORM

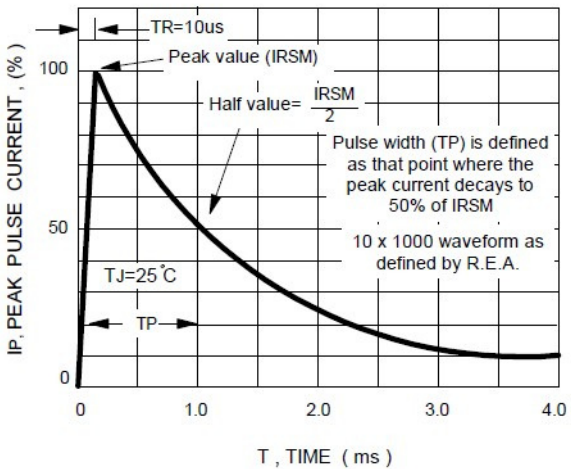
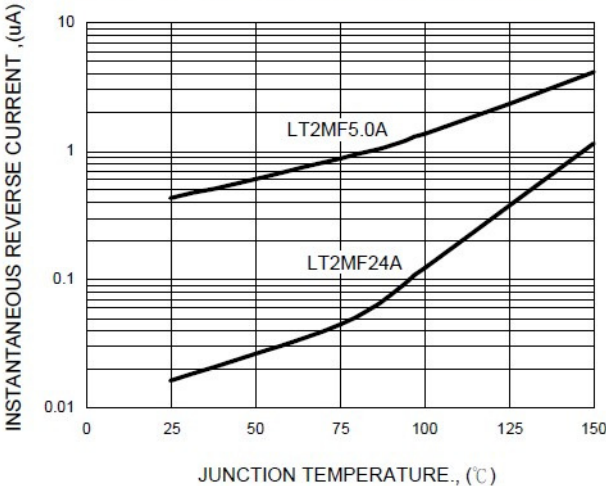


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



Device Uni-directional	Marking	Working Peak Reverse Voltage	Breakdown voltage			Maximum Reverse Leakage at V_{RWM}	Maximum Reverse Surge Current	Maximum Reverse Voltage at I_{RSM} (Clamping Voltage)
		V_{RWM}(V)	Min.(V)	Max.(V)	@IT(mA)	IR (uA)	I_{RSM}(A)	V_{RSM}(V)
LT2MF5.0A	MFB	5.0	6.40	7.07	10	50	21.7	9.2
LT2MF6.0A	MFC	6.0	6.67	7.37	10	50	19.4	10.3
LT2MF8.5A	MFD	8.5	9.44	10.43	1	10	13.9	14.4
LT2MF10A	MFE	10	11.10	12.3	1	5.0	11.8	17.0
LT2MF12A	MFF	12	13.3	14.7	1	1.0	10.1	19.9
LT2MF13A	MFG	13	14.4	15.9	1	1.0	9.3	21.5
LT2MF15A	MFP	15	16.7	18.5	1	1.0	8.2	24.4
LT2MF16A	MFH	16	17.1	18.9	1	1.0	7.7	26.0
LT2MF18A	MFI	18	20.0	22.1	1	1.0	6.9	29.2
LT2MF20A	MFJ	20	22.2	24.5	1	1.0	6.2	32.4
LT2MF22A	MFQ	22	24.4	27.0	1	1.0	5.6	35.5
LT2MF24A	MFK	24	25.7	28.4	1	1.0	5.1	38.9
LT2MF26A	MFL	26	28.9	31.9	1	1.0	4.8	42.1
LT2MF28A	MFM	28	31.1	34.4	1	1.0	4.4	45.4
LT2MF30A	MFN	30	33.3	36.8	1	1.0	4.1	48.4
LT2MF36A	MFO	36	40.0	44.2	1	1.0	3.4	58.1
LT2MF40A	MFR	40	44.4	49.1	1	1.0	3.1	64.5
LT2MF43A	MFS	43	47.8	52.8	1	1.0	2.88	69.4
LT2MF45A	MFT	45	50.0	55.3	1	1.0	2.75	72.7
LT2MF48A	MFU	48	53.3	58.9	1	1.0	2.58	77.4
LT2MF51A	MFV	51	56.7	62.7	1	1.0	2.43	82.4

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