LITE-ON SEMICONDUCTOR

LT2M SERIES

SURFACE MOUNT UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSORS

STAND-OFF VOLTAGE - **5.0** to **24** Volts
POWER DISSIPATION - **200** WATTS

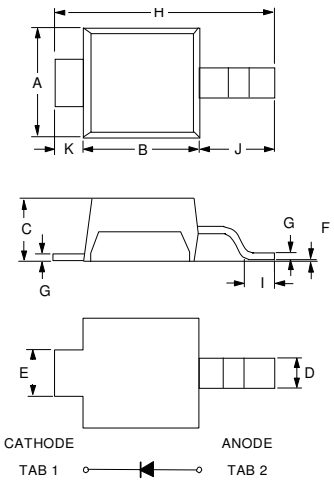
FEATURES

- 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
- IEC6100-4-2, Level 4(ESD), >15KV(air); >8KV(Contact)
- RoHS compliant

MECHANICAL DATA

- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.)
- Polarity : Cathode designated by TAB1
- Weight : 15.5 mg

DO-216AA



DO-216AA		
DIM.	MIN.	MAX.
A	1.75	2.05
B	1.80	2.20
C	0.95	1.25
D	0.42	0.68
E	0.70	1.00
F	-0.05	+0.10
G	0.10	0.25
H	3.65	3.95
I	0.40	0.70
J	1.10	1.50
K	0.20	0.80
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

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.
Power Dissipation on infinite heatsink @T_A =100 ℃	$P_{M(AV)}$	2.5	WATTS
Typical Thermal Resistance (Note 2) (Note 3)	$R_{\theta JT}$ $R_{\theta JA}$	20 250	°C/W
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.1.
2. Thermal Resistance Junction to Tab.
3. Thermal Resistance Junciton to ambient on PCB with recommended pad layout

REV. 6, Jan-2016, KSIA03

FIG.1 - PEAK PULSE POWER DERATING CURVE

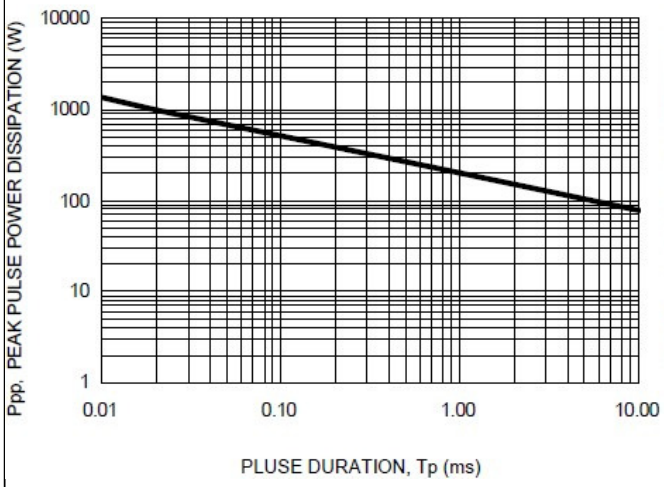


FIG.2 - PEAK PULSE POWER DERATING CURVE

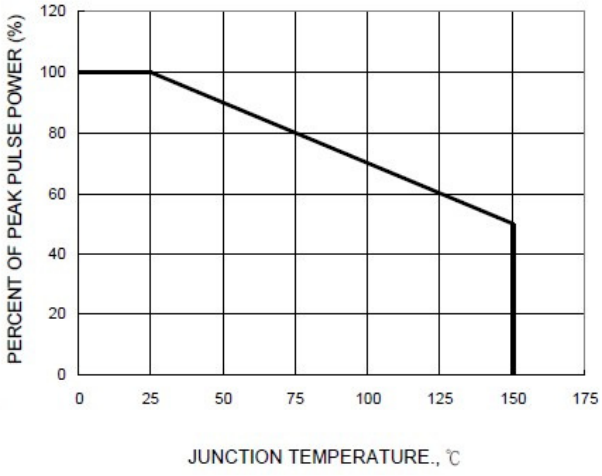


FIG.3 - PULSE WAVEFORM

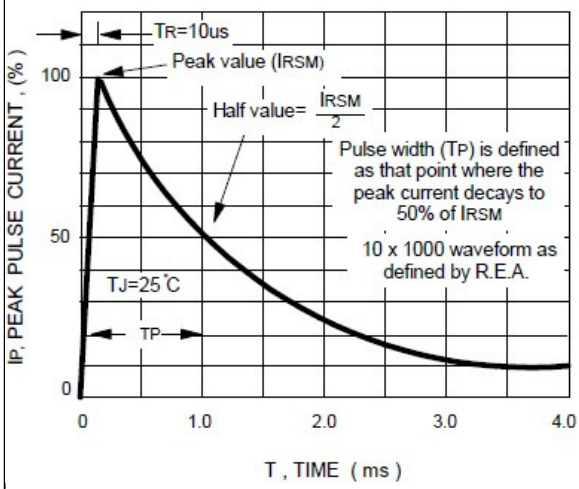


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

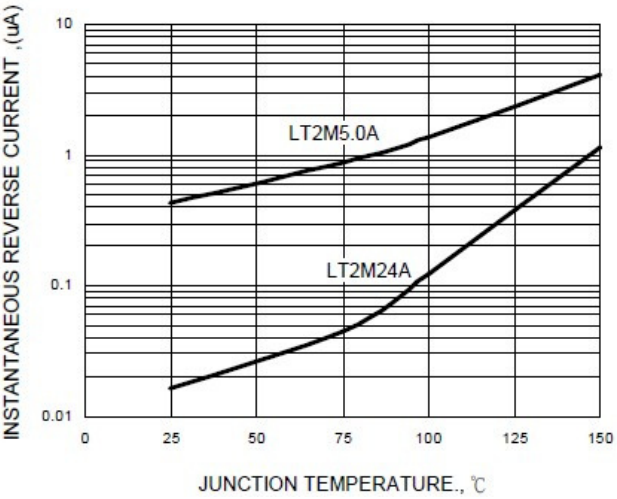


FIG.5 - AVERAGE POWER DERATING CURVE

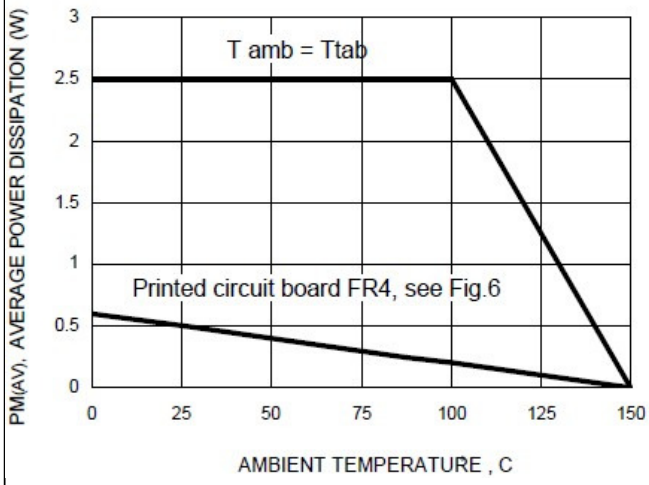
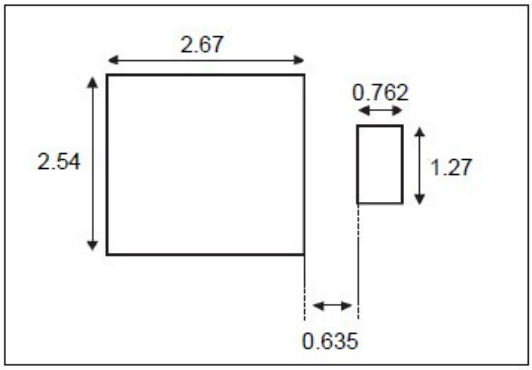


FIG.6 - FOOT PRINT DIMENSION Print (mm)



Device Uni-directional	Marking	Working Peak Reverse Voltage	Breakdowm voltage VBR Volts			Maximum Reverse Leakage at VRWM	Maximum Reverse Surge Current	Maximum Reverse Voltage at IRSM (Clamping Voltage)	Off-State Capacitance
		VRWM(Volts)	Min.	Max.	@IT(mA)	IR (uA)	IRSM(Amps)	VRSM(Volts)	Co (pf)
LT2M5.0A	MNB	5.0	6.40	7.07	10	50	21.7	9.2	850.0
LT2M12A	MNF	12.0	13.3	14.7	1	1	10.1	19.9	330.0
LT2M16A	MNH	16.0	17.1	18.9	1	1	7.7	26.0	260.0
LT2M24A	MNK	24.0	25.7	28.4	1	1	5.1	38.9	180.0

Note: Off-state capacitance measured at f=1.0MHz; 1.0VRMS signal; VR=2VDC bias.

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