

**SURFACE MOUNT UNIDIRECTIONAL  
TRANSIENT VOLTAGE SUPPRESSORS**

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

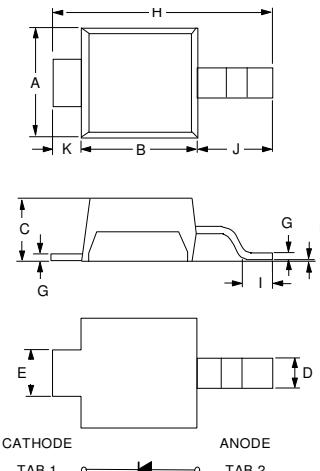
**FEATURES**

- For surface mounted applications
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has UL flammability classification 94V-0
- 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°C 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 $T_J = 25^\circ\text{C}$ , $T_P = 1\text{ms}$ (Note 1)	$P_{PK}$	Minimum 200	WATTS
Non repetitive Peak Forward Surge Current 8.3ms single half sine-wave $\text{@ } T_J = 25^\circ\text{C}$	$I_{FSM}$	25	AMPS.
Power Dissipation on infinite heatsink $\text{@ } T_A = 100^\circ\text{C}$	$P_{M(AV)}$	2.5	WATTS
Typical Thermal Resistance (Note 2) (Note 3)	$R_{\text{eJT}}$ $R_{\text{eJA}}$	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  $T_J = 25^\circ\text{C}$  per Fig.1.

2. Thermal Resistance Junction to Tab.

3. Thermal Resistance Junction to ambient on PCB with recommended pad layout

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**RATING AND CHARACTERISTIC CURVES  
LT2M SERIES**

**LITEON**

FIG.1 - PEAK PULSE POWER DERATING CURVE

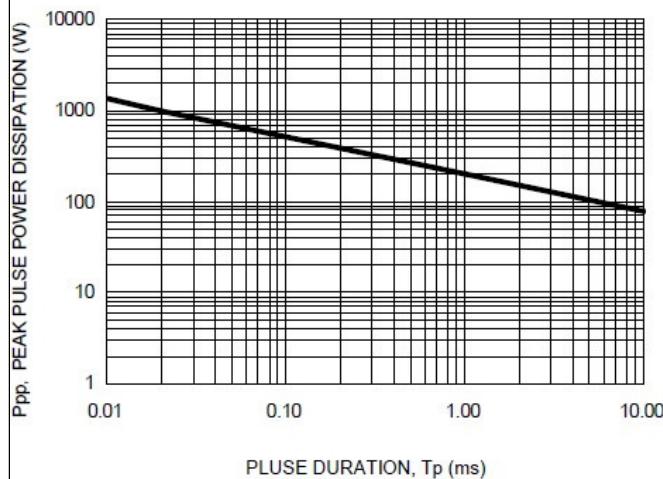


FIG.2 - PEAK PULSE POWER DERATING CURVE

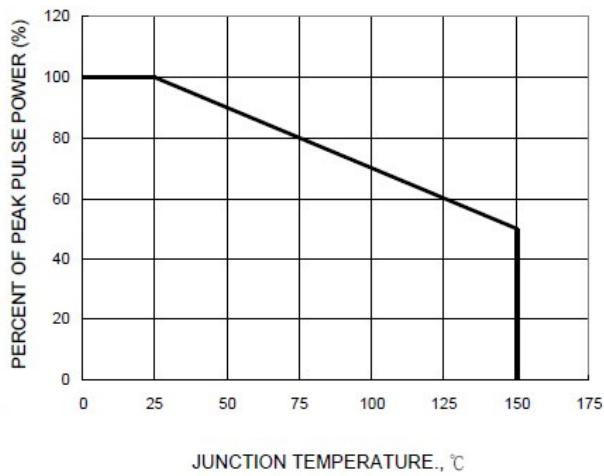


FIG.3 - PULSE WAVEFORM

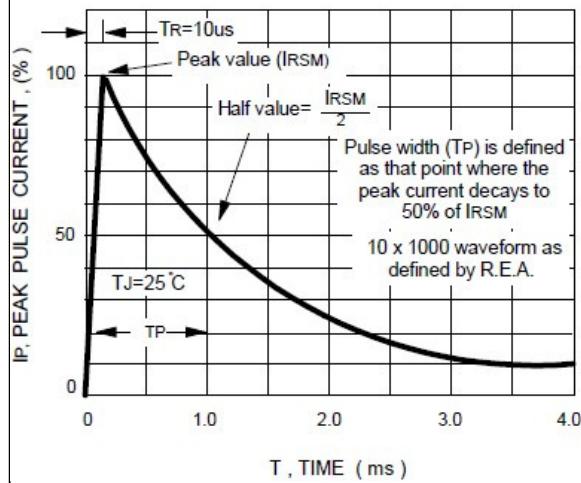


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

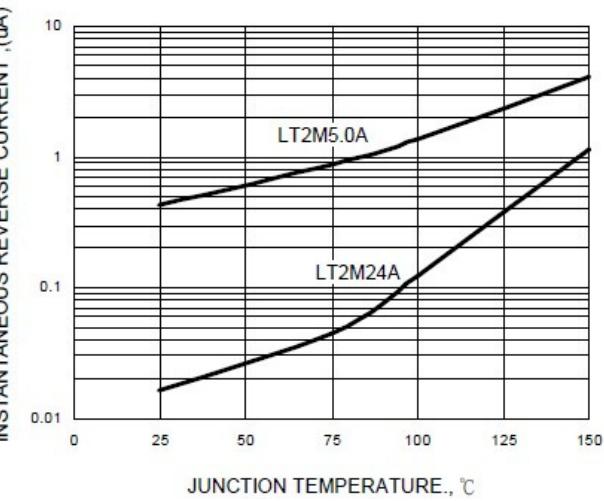


FIG.5 - AVERAGE POWER DERATING CURVE

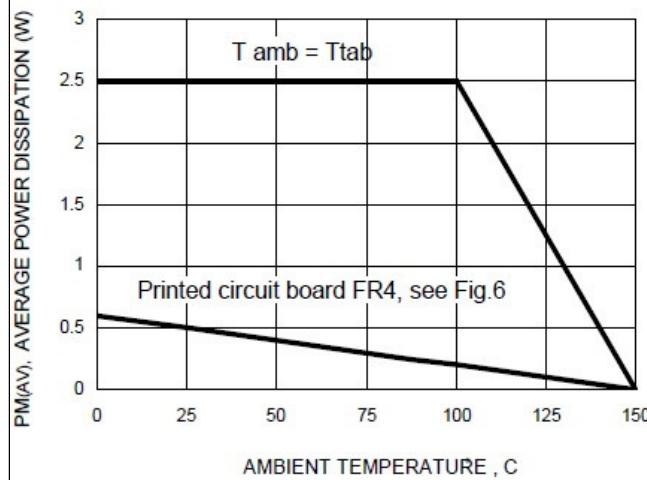
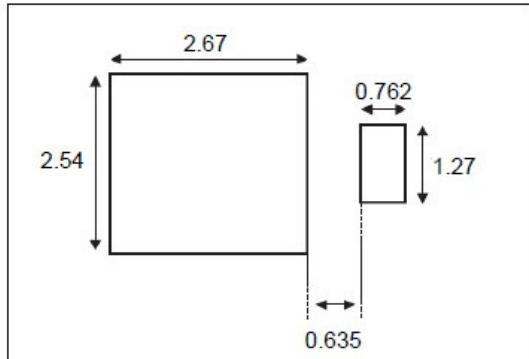


FIG.6 - FOOT PRINT DIMENSION Print (mm)



Device Uni- directional	Marking	Working Peak Reverse Voltage	Breakdown 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.				
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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