# LITE ON SEMICONDUCTOR

### **LT2M SERIES**

### SURFACE MOUNT UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSORS

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

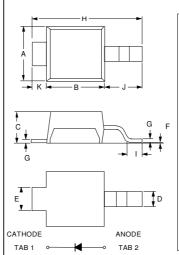
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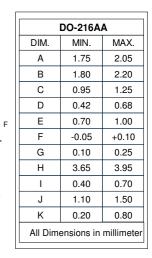
#### FEATURES

- 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





#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at  $25^{\circ}$ 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 TJ= 25 $^\circ\!\mathbb{C},$ TP = 1ms (Note 1)	Ррк	Minimum 200	Minimum 200		
Non repetitve Peak Forward Surge Current 8.3ms single half sine-wave @ TJ = 25 $^{\circ}C$	IFSM	25	25		
Power Dissipation on infinite heatsink @Ta = 100 $^{\circ}C$	PM(AV)	2.5	2.5		
Typical Thermal Resistance (Note 2) (Note 3)	Rejt Reja	20 250		°C/W	
Operating Temperature Range	TJ	-55 to +175	-55 to +175		
Storage Temperature Range	Тята	-55 to +175		°C	
NOTES 1 Non-repetitive current pulse per Fig	3 and derated	above Ti– 25 ℃ per Fig 1	BEV 6 Jan-2016	KEIVUS	

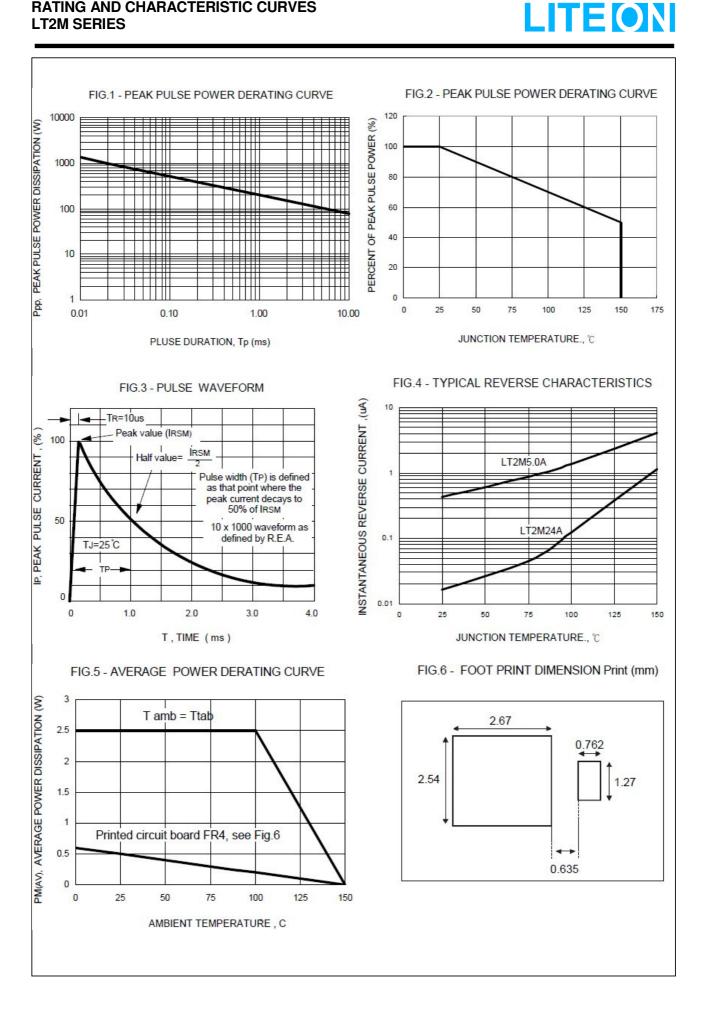
NOTES : 1. Non-repetitive current pulse, per Fig. 3 and derated above TJ= 25  $^{\circ}$ C per Fig.1.

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2. Thermal Resistance Junction to Tab.

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

#### **RATING AND CHARACTERISTIC CURVES LT2M SERIES**



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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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