

**SURFACE MOUNT UNIDIRECTIONAL
TRANSIENT VOLTAGE SUPPRESSORS**

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

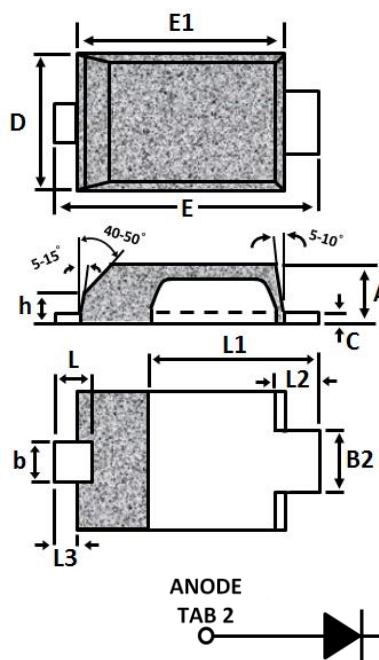
FEATURES

- For surface mounted applications
- Reliable low cost construction unitizing molded plastic technique
- Typical IR less than 1uA above 10V
- Fast response time: typically less than 1.0ns
- IEC61000-4-2, 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 grams

MITE-FLAT



| 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°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

| PARAMETER | SYMBOL | VALUE | UNIT |
|--------------------------------------------------------------------------------------------------|-----------|-------------|------|
| Peak power dissipation @ $T_J = 25^\circ\text{C}$, $t_p = 1\text{ms}$ (Note1) | P_{PK} | Minimum 200 | W |
| Non repetitive peak forward surge current 8.3ms single half sine-wave @ $T_J = 25^\circ\text{C}$ | I_{FSM} | 25 | A |
| Operating temperature range | T_J | -55 to +175 | °C |
| Storage temperature range | T_{STG} | -55 to +175 | °C |

REV.15,NOV-2020, KSIP01

Notes:

1. Non-repetitive current pulse, per fig. 3 and derated above $T_J = 25^\circ\text{C}$ per fig.2.

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FIG.1- Peak Pulse Power Rating Curve

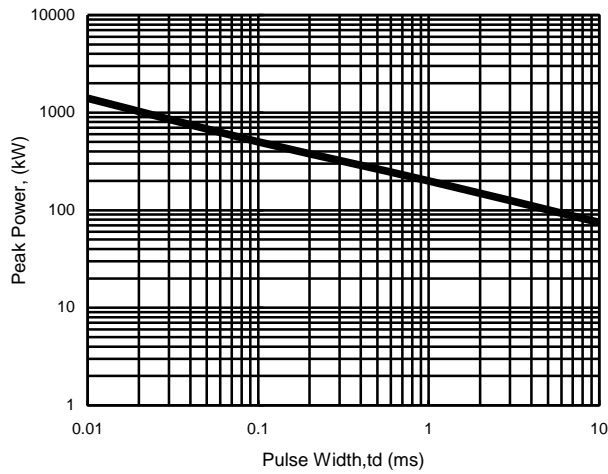


FIG.2- Pulse Derating Curve

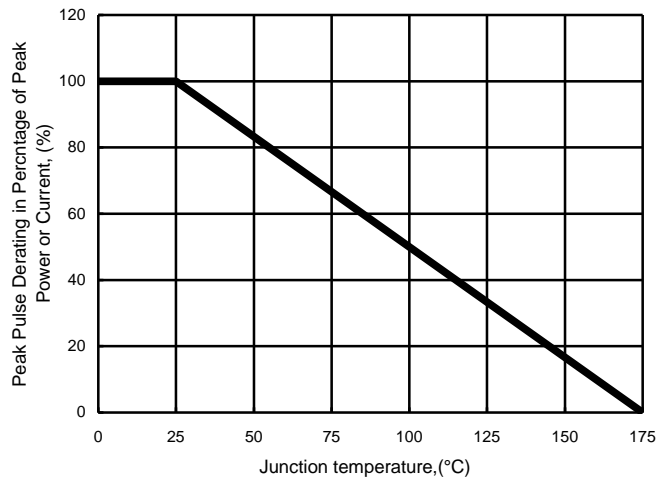


FIG.3- Pulse Waveform

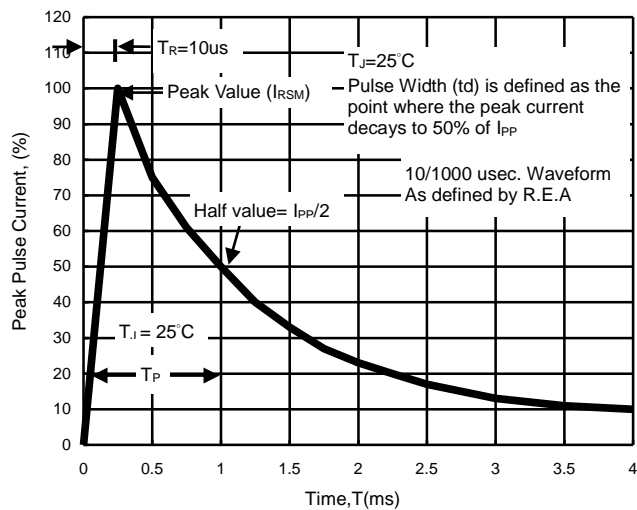
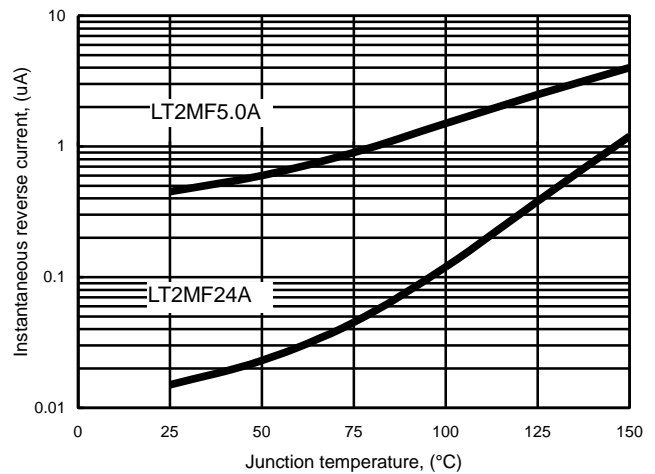


FIG.4- Typical reverse characteristics



LT2MF SERIES



| Device uni-directional | Device marking code | Working peak reverse voltage | Breakdown voltage V_{BR} volts | | | Maximum reverse leakage at V_{RWM} | Maximum reverse surge current | Maximum reverse voltage at I_{RSM} (clamping voltage) |
|---------------------------|------------------------|---------------------------------|-------------------------------------|-------|---------|-----------------------------------------|----------------------------------|---------------------------------------------------------------|
| | | $V_{RWM}(V)$ | Min. | Max | @IT(mA) | $I_R(\mu A)$ | $I_{RSM}(A)$ | $V_{RSM}(V)$ |
| 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 | 11.1 | 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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