

#### **Features**

Maximum Output current I<sub>OM</sub>: 0.8A

Output voltage V<sub>O</sub>: 15V

• Continuous total dissipation

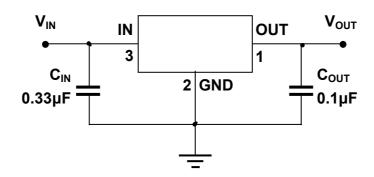
P<sub>D</sub>: 1.25 W (Ta= 25°C)



# **Package Marking and Ordering Information**

| Product ID    | Pack                | Marking | Qty(PCS) |
|---------------|---------------------|---------|----------|
| L78M15ABDT-TR | TO-252-2L<br>(DPAK) | 78M15   | 2500     |

### **Typical Application Circuit**



#### **Absolute Maximum Ratings**

| Characteristics              | Symbol              | Value      | Unit |
|------------------------------|---------------------|------------|------|
| Maximum input voltage        | Vin                 | 35         | V    |
| Maximum junction temperature | T <sub>J Max</sub>  | 150        | °C   |
| Storage temperature          | T <sub>stg</sub>    | - 65 ~ 150 | °C   |
| Soldering temperature & time | T <sub>solder</sub> | 260°C, 10s | -    |

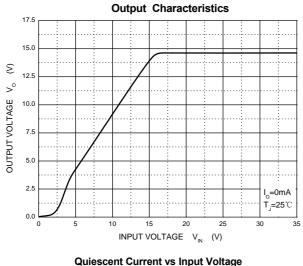


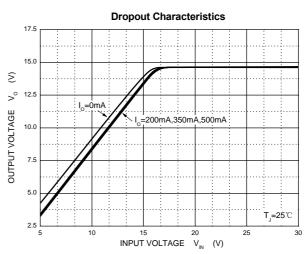
# **Electrical Characteristics**

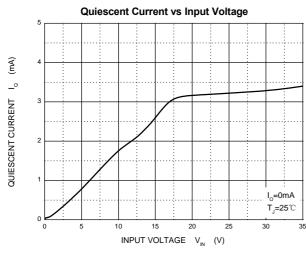
| Parameter                   | Symbol         | Test conditions                                  |        | Min   | Тур | Max   | Unit |
|-----------------------------|----------------|--|--------|-------|-----|-------|------|
|                             |                | Vi=23V,lo=350mA                                  | 25℃    | 14.4  | 15  | 15.6  | V    |
| Output Voltage              | Vo             | 17.5≤V <sub>i</sub> ≤30V, Io=5mA~350mA<br>Po≤15W | 0-125℃ | 14.25 | 15  | 15.75 | V    |
| Load Degulation             | ۸۱/۵           | Io=5mA~500mA                                     | 25℃    |       |     | 300   | mV   |
| Load Regulation             | ΔVο            | lo=5mA~200mA                                     | 25℃    |       |     | 150   | mV   |
| Line Regulation             | ΔVο            | 17.5V≤V <sub>i</sub> ≤30V, lo=200mA              | 25℃    |       |     | 100   | mV   |
|                             |                | 20V≤V <sub>i</sub> ≤26V, lo=200mA                | 25℃    |       |     | 50    | mV   |
| Quiescent Current           | Iq             | Vi=23V,lo=350mA                                  | 25℃    |       |     | 6     | mA   |
| Quiescent Current<br>Change | Δlq            | 17.5V≤V <sub>i</sub> ≤30V, lo=200mA              | 0-125℃ |       |     | 0.8   | mA   |
|                             | Δlq            | Vi=23V, Io=5mA~350mA                             | 0-125℃ |       |     | 0.5   | mA   |
| Output Noise Voltage        | V <sub>N</sub> | 10Hz≤f≤100KHz                                    | 25℃    |       | 90  |       | μV   |
| Ripple Rejection            | RR             | 18.5≤V <sub>i</sub> ≤28.5V,f=120Hz,lo=300mA      | 0-125℃ | 54    |     |       | dB   |
| Dropout Voltage             | Vd             |  | 25℃    |       | 2   |       | V    |

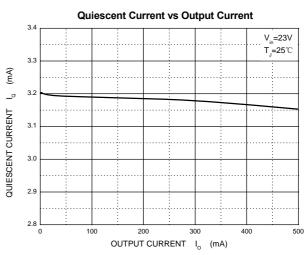


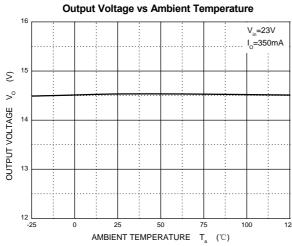
# **Typical Characteristics**

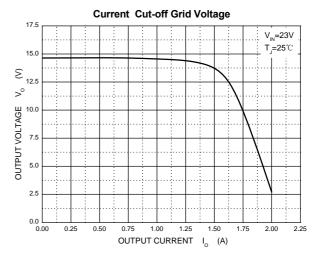




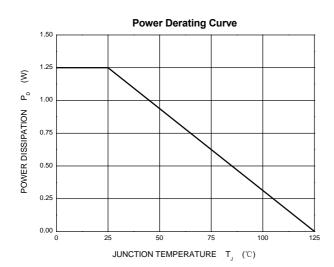






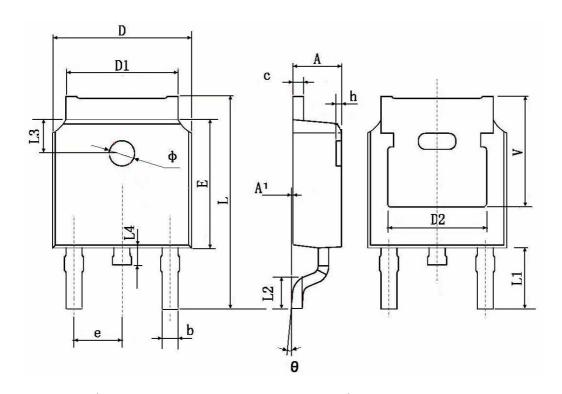








# TO-252-2L(DPAK) Package Information



| Symbol | Dimensions In Millimeters |            | Dimensions In Inches |            |  |
|--------|---------------------------|------------|----------------------|------------|--|
|        | Min.                      | Max.       | Min.                 | Max.       |  |
| Α      | 2.200                     | 2.400      | 0.087                | 0.094      |  |
| A1     | 0.000                     | 0.127      | 0.000                | 0.005      |  |
| b      | 0.660                     | 0.860      | 0.026                | 0.034      |  |
| С      | 0.460                     | 0.580      | 0.018                | 0.023      |  |
| D      | 6.500                     | 6.700      | 0.256                | 0.264      |  |
| D1     | 5.100                     | 5.460      | 0.201                | 0.215      |  |
| D2     | 0.483                     | TYP.       | 0.190 TYP.           |            |  |
| Е      | 6.000                     | 6.200      | 0.236                | 0.244      |  |
| е      | 2.186                     | 2.386      | 0.086                | 0.094      |  |
| L      | 9.800                     | 10.400     | 0.386                | 0.409      |  |
| L1     | 2.900                     | 2.900 TYP. |                      | 0.114 TYP. |  |
| L2     | 1.400                     | 1.700      | 0.055                | 0.067      |  |
| L3     | 1.600                     | TYP.       | 0.063 TYP.           |            |  |
| L4     | 0.600                     | 1.000      | 0.024                | 0.039      |  |
| Ф      | 1.100                     | 1.300      | 0.043                | 0.051      |  |
| θ      | 0°                        | 8°         | 0°                   | 8°         |  |
| h      | 0.000                     | 0.300      | 0.000                | 0.012      |  |
| V      | 5.350 TYP.                |            | 0.211 TYP.           |            |  |



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