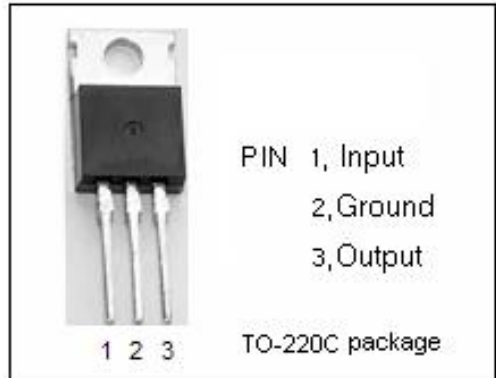
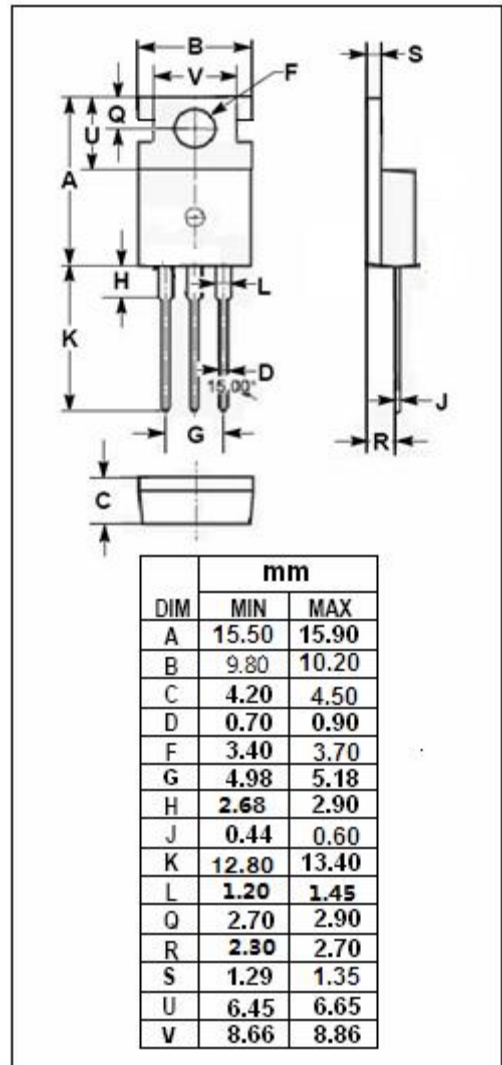


**isc Three Terminal Negative Voltage Regulator**
**LM7915**
**FEATURES**

- Output current in excess of 1.5 A
- Output voltage of 15V
- Internal thermal overload protection
- Output transition Safe-Area compensation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

| SYMBOL           | PARAMETER                      | RATING             | UNIT |
|------------------|--------------------------------|--------------------|------|
| V <sub>i</sub>   | DC input voltage               | -35                | V    |
| I <sub>o</sub>   | Output current                 | internally limited |      |
| P <sub>tot</sub> | Power dissipation              | internally limited |      |
| T <sub>OP</sub>  | Operating junction temperature | 0~125              | °C   |
| T <sub>stg</sub> | Storage temperature            | -55~150            | °C   |


**THERMAL CHARACTERISTICS**

| SYMBOL              | PARAMETER                               | MAX | UNIT |
|---------------------|---|-----|------|
| R <sub>th j-c</sub> | Thermal Resistance, Junction to Case    | 3   | °C/W |
| R <sub>th j-a</sub> | Thermal Resistance, Junction to Ambient | 50  | °C/W |

## isc Three Terminal Negative Voltage Regulator

## LM7915

## • ELECTRICAL CHARACTERISTICS

T<sub>j</sub>=25°C (V<sub>i</sub>= -23V, I<sub>o</sub>=0.5A, C<sub>i</sub>= 2.2 μ F, C<sub>o</sub>= 1.0 μ F unless otherwise specified)

| SYMBOL          | PARAMETER                | CONDITIONS   | MIN    | TYP | MAX    | UNIT |
|-----------------|--------------------------|--|--------|-----|--------|------|
| V <sub>o</sub>  | Output Voltage           | V <sub>in</sub> =-23V; I <sub>o</sub> =1A                      | -14.4  |     | -15.6  | V    |
| V <sub>o</sub>  | Output Voltage           | V <sub>in</sub> =-17.5 to -30V;<br>I <sub>o</sub> = 5mA to 1A; | -14.25 |     | -15.75 | V    |
| ΔV <sub>v</sub> | Line Regulation          | -17.5V ≤ V <sub>in</sub> ≤ -30V; I <sub>o</sub> =0.5A          |        |     | 100    | mV   |
| ΔV <sub>i</sub> | Load Regulation          | 5.0mA ≤ I <sub>o</sub> ≤ 1.5A; V <sub>in</sub> =-23V           |        |     | 200    | mV   |
| I <sub>b</sub>  | Quiescent Current        | V <sub>in</sub> =-23V; I <sub>o</sub> =1A                      |        |     | 3      | mA   |
| Δb <sub>1</sub> | Quiescent Current Change | 5.0mA ≤ I <sub>o</sub> ≤ 1.0A; V <sub>in</sub> =-23V           |        |     | 0.5    | mA   |
| Δb <sub>2</sub> | Quiescent Current Change | -17.5V ≤ V <sub>in</sub> ≤ -30V; I <sub>o</sub> =0.5A          |        |     | 0.5    | mA   |

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