

## ELECTRICAL CHARACTERISTICS

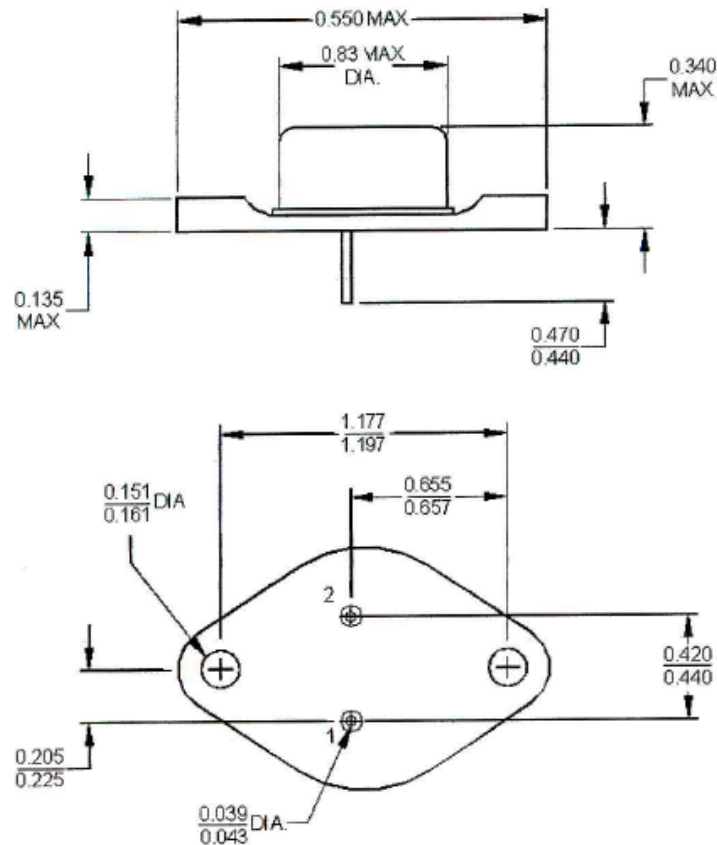
| PARAMETER                                                   | TEST CONDITIONS                                                                               | TEMPERATURE (2)<br>CASE TEMP | TYPICAL             |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------|---------------------|
| Output Voltage (1)                                          | $I_{OUT} = 300 \text{ mA}$<br>$V_{IN} = V_{OUT} + 3\text{VDC}$                                | +25°C to +200°C              | $V_{OUT} \pm 1.0\%$ |
| Line Regulation (1)                                         | $V_{IN} = V_{OUT} + 3\text{VDC}$<br>to $V_{IN} = 38 \text{ VDC}$<br>$I_{OUT} = 50 \text{ mA}$ | +25°C to +200°C              | $V_{OUT} \pm 0.3\%$ |
| Load Regulation                                             | $V_{IN} = V_{OUT} + 5\text{VDC}$<br>$I_{OUT} = 50 \text{ to } 300\text{mA}$                   | +25°C to +200°C              | $V_{OUT} \pm 0.5\%$ |
| Ripple Rejection at 120 Hz                                  | $V_{IN} = V_{OUT} + 5\text{VDC}$                                                              | +25°C                        | -60db               |
| Standby Current                                             | $V_{IN} = V_{OUT} + 5\text{VDC}$<br>$I_{OUT} = 0$                                             | +25°C                        | 30mA                |
| Short Circuit Current                                       | $V_{IN} = V_{OUT} + 5\text{VDC}$                                                              | +25°C                        | 400mA               |
| Short Circuit Current                                       | $V_{IN} = V_{OUT} + 5\text{VDC}$                                                              | +200°C                       | 200mA               |
| Foldback Current (knee)                                     | $V_{IN} = V_{OUT} + 5\text{VDC}$                                                              | +25°C                        | 2A                  |
| Foldback Current (knee)                                     | $V_{IN} = V_{OUT} + 5\text{VDC}$                                                              | +200°C                       | 1.5A                |
| Noise Output                                                | $V_{IN} = V_{OUT} + 5\text{VDC}$<br>$I_{OUT} = 300 \text{ mA}$                                | +25°C                        | 2mVRMS              |
| Differential Voltage<br>* ( $\Delta V = V_{IN} - V_{OUT}$ ) | $I_{OUT} = 300 \text{ mA}$                                                                    | +25°C to +200°C              | 3VDC MIN            |

## Notes:

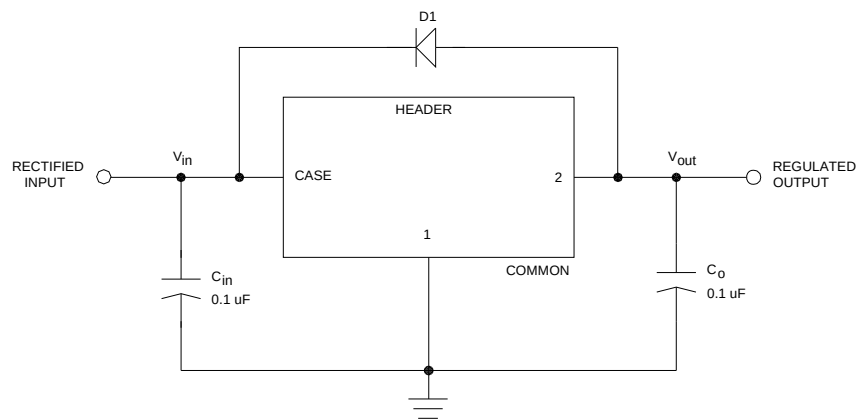
- 1)  $V_{IN} = 10\text{V Min}$
- 2) Regulator operation guaranteed by design @ -25°C for test condition listed. To designate factory screening add a "-1" to the Micropac part number; i.e. 42094-015-1.

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Micropac reserves the right to make changes at any time in order to improve design and to supply the best product possible.

## Mechanical Configuration



## Typical Connection Diagram



### Electrical Connection

|       |                  |
|-------|------------------|
| Case  | V <sub>IN</sub>  |
| Pin 1 | Ground           |
| Pin 2 | V <sub>OUT</sub> |

### C<sub>IN</sub> & C<sub>O</sub>:

- Recommended as good analog design practice to ensure regulator stability. These are in addition to supply and load capacitance.
- Required if regulator is located more than 2" or 3" away from input supply or output load capacitor(s). Capacitors must be installed as close to the regulator Terminals as possible to ensure stability.
- X5R & X7R type ceramic capacitors are recommended because of minimal variation in value and ESR over temperature.

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