## **ELECTRICAL CHARACTERISTICS**

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

Notes:

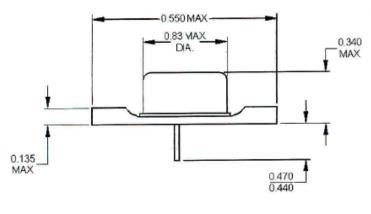
Downloaded from Arrow.com.

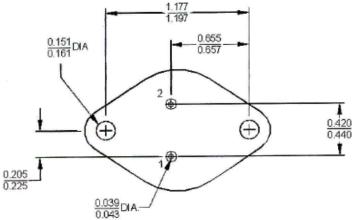
- 1)  $V_{IN} = 10V Min$
- 2) Regulator operation guaranteed by design @ -25°C for test condition listed. To designate factory screening add a "-1" to the Micropac part number; i.e. 42094-015-1.

Micropac Industries cannot assume any responsibility for any circuits shown or represent that they are free from patent infringement.

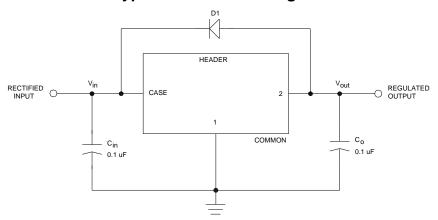
Micropac reserves the right to make changes at any time in order to improve design and to supply the best product possible.

## **Mechanical Configuration**





## **Typical Connection Diagram**



Electrical Connection		
Case	$V_{IN}$	
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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