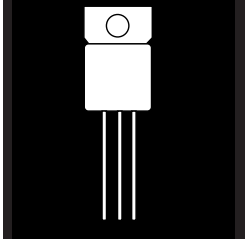


## (COTS) COMMERCIAL OFF-THE-SHELF 3.0 AMP POSITIVE ADJUSTABLE VOLTAGE REGULATOR IN TO-257 PACKAGE



Three Terminal, Adjustable Voltage, 3.0 Amp  
Precision Positive Regulator In Hermetic  
JEDEC TO-257AA Package

### FEATURES

- Isolated Hermetic Package, JEDEC TO-257AA Outline
- Reference Voltages Set To  $\pm 2\%$
- Built-In Thermal Overload Protection
- Short Circuit Current Limiting

### DESCRIPTION

These three terminal positive regulators are supplied in a hermetically sealed isolated, metal TO-257 package. All protective features are designed into the circuit including thermal shutdown, current limiting and safe-area control. With heat sinking, they can deliver over 3.0 amps of output current. These units feature 2% initial voltage tolerance, 0.35% load regulation and .01% line regulation.

### ABSOLUTE MAXIMUM RATINGS @ 25°C

Input - Output Voltage Differential .....	+35 V
Operating Junction Temperature Range .....	- 55°C to + 150°C
Storage Temperature Range .....	- 65°C to + 150°C

#### Typical Power/Thermal Characteristics:

Rated Power @ 25°C

$T_C$ .....	25 W
$T_A$ .....	3 W
Thermal Resistance .....	4.2°C/W
$\theta_{TA}$ .....	50°C/W

ELECTRICAL CHARACTERISTICS -55°C T<sub>A</sub> 125°C (Note 1) unless otherwise specified

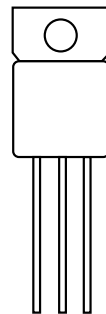
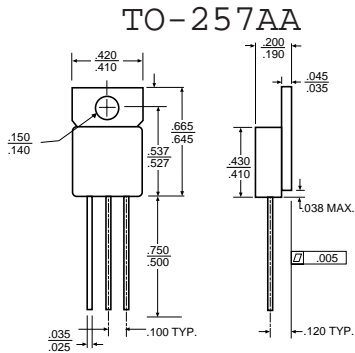
Test	Symbol	Conditions	Limits		Unit
			Min.	Max.	
Reference Voltage	V <sub>REF</sub>	I <sub>OUT</sub> = 10mA T <sub>A</sub> = 25°C	1.20	1.30	V
		3.0V (V <sub>N</sub> - V <sub>OUT</sub> ) 35V, P 30W 10mA I <sub>OUT</sub> 3.0A (Note 2)	1.20	1.30	V
Line Regulation (Note 2)	R <sub>LINE</sub>	3.0V (V <sub>N</sub> - V <sub>OUT</sub> ) 35V, I <sub>OUT</sub> = 10mA, T <sub>J</sub> = 25°C		0.01	%/V
		3.0V (V <sub>N</sub> - V <sub>OUT</sub> ) 35V, I <sub>OUT</sub> = 10mA		0.05	%/V
Load Regulation (Note 2)	R <sub>LOAD</sub>	10mA I <sub>OUT</sub> 3.0A, V <sub>OUT</sub> 5.0A, T <sub>J</sub> = 25°C		17.5	mV
		10mA I <sub>OUT</sub> 3.0A, V <sub>OUT</sub> 5.0A	50		mV
		10mA I <sub>OUT</sub> 3.0A, V <sub>OUT</sub> 5.0A, T <sub>J</sub> = 25°C	0.35		%
		10mA I <sub>OUT</sub> 3.0A, V <sub>OUT</sub> 5.0A	1.0		%
Thermal Regulation		20ms pulse, T <sub>A</sub> = 25°C		0.01	%/W
Ripple Rejection (Note 3)	R <sub>N</sub>	V <sub>OUT</sub> = 10V, f = 120Hz C <sub>ADJ</sub> = 10μF	66		dB
Adjust Pin Current	I <sub>Adj</sub>			100	μA
Adjust Pin Current Change	I <sub>Adj</sub>	10mA I <sub>OUT</sub> 3.0A, I <sub>OUT</sub> = 10mA 3.0V (V <sub>N</sub> - V <sub>OUT</sub> ) 35V	5.0		μA
Minimum Load Current	I <sub>MIN</sub>	(V <sub>N</sub> - V <sub>OUT</sub> ) = 35V	5.0		mA
Current Limit	I <sub>EL</sub>	(V <sub>N</sub> - V <sub>OUT</sub> ) = 10V	3.0		A
		(V <sub>N</sub> - V <sub>OUT</sub> ) = 30V	0.3		A

Notes:

1. Unless otherwise specified, these specifications apply for (V<sub>N</sub> - V<sub>OUT</sub>) = 5.0V and I<sub>OUT</sub> = 1.5A.
2. Regulation is measured at a constant junction temperature using a pulse technique. Changes in output voltage due to heating effects are covered under the specification for thermal regulation.
3. Guaranteed if not tested to the limits specified.

MECHANICAL OUTLINE

PIN CONNECTION



Front View  
 Pin 1: Adjust  
 Pin 2: Vout  
 Pin 3: Vin  
 Tab: Isolated

1 2 3