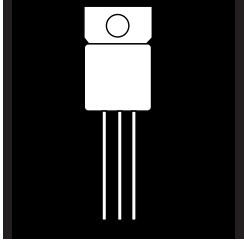


(COTS) COMMERCIAL OFF-THE-SHELF 3.0 AMP POSITIVE ADJUSTABLE VOLTAGE REGULATOR IN TO-257 PACKAGE



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
θ_{TA}	50°C/W

ELECTRICAL CHARACTERISTICS -55°C T_A 125°C (Note 1) unless otherwise specified

Test	Symbol	Conditions	Limits		Unit
			Min.	Max.	
Reference Voltage	V_{REF}	$I_{OUT} = 10mA$ $T_A = 25^\circ C$	1.20	1.30	V
		3.0V ($V_{IN} - V_{OUT}$) 35V, P 30W 10mA I_{OUT} 3.0A (Note 2)	1.20	1.30	V
Line Regulation (Note 2)	R_{LINE}	3.0V ($V_{IN} - V_{OUT}$) 35V, $I_{OUT} = 10mA$, $T_J = 25^\circ C$		0.01	%/V
		3.0V ($V_{IN} - V_{OUT}$) 35V, $I_{OUT} = 10mA$		0.05	%/V
Load Regulation (Note 2)	R_{LOAD}	10mA I_{OUT} 3.0A, $V_{OUT} = 5.0A$, $T_J = 25^\circ C$		17.5	mV
		10mA I_{OUT} 3.0A, $V_{OUT} = 5.0A$	50		mV
		10mA I_{OUT} 3.0A, $V_{OUT} = 5.0A$, $T_J = 25^\circ C$	0.35		%
		10mA I_{OUT} 3.0A, $V_{OUT} = 5.0A$	1.0		%
Thermal Regulation		20ms pulse, $T_A = 25^\circ C$		0.01	%/W
Ripple Rejection (Note 3)	R_N	$V_{OUT} = 10V$, $f = 120Hz$ $C_{ADJ} = 10\mu F$	66		dB
Adjust Pin Current	I_{Adj}			100	μA
Adjust Pin Current Change	I_{Adj}	10mA I_{OUT} 3.0A, $I_{OUT} = 10mA$ 3.0V ($V_{IN} - V_{OUT}$) 35V	5.0		μA
Minimum Load Current	I_{MIN}	$(V_{IN} - V_{OUT}) = 35V$	5.0		m A
Current Limit	I_{EL}	$(V_{IN} - V_{OUT}) = 10V$	3.0		A
		$(V_{IN} - V_{OUT}) = 30V$	0.3		A

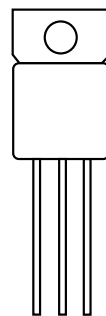
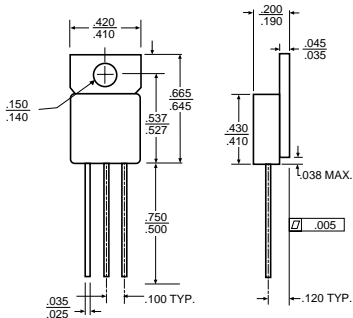
Notes:

1. Unless otherwise specified, these specifications apply for $(V_{IN} - V_{OUT}) = 5.0V$ and $I_{OUT} = 1.5A$.
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

TO-257AA



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

1 2 3