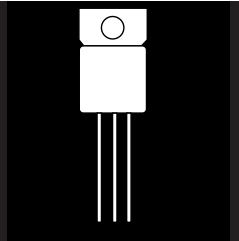


(COTS) COMMERCIAL OFF-THE-SHELF 3.0 AMP POSITIVE
ADJUSTABLE VOLTAGE REGULATOR IN TO-257 PACKAGE



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_{JA} 50°C/W

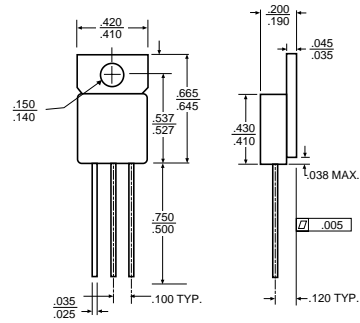
ELECTRICAL CHARACTERISTICS -55°C T_A 125°C (Note 1) unless otherwise specified

Test	Symbol	Conditions	Limits		Unit
			Min.	Max.	
Reference Voltage	V _{REF}	I _{OUT} = 10mA T _A = 25°C	1.20	1.30	V
		3.0V (V _N - 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 _N - V _{OUT}) 35V, I _{OUT} = 10mA, T _J = 25°C		0.01	%/V
		3.0V (V _N - 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°C		17.5	m V
		10mA I _{OUT} 3.0A, V _{OUT} 5.0A	50		m V
		10mA I _{OUT} 3.0A, V _{OUT} 5.0A, T _J = 25°C	0.35	%	
		10mA I _{OUT} 3.0A, V _{OUT} 5.0A	1.0	%	
Thermal Regulation		20ms pulse, T _A =25°C		0.01	% / W
Ripple Rejection (Note 3)	R _N	V _{OUT} = 10V, f = 120Hz C _{ADJ} = 10μF	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 _N - V _{OUT}) 35V	5.0		μA
Minimum Load Current	I _{MIN}	(V _N - V _{OUT}) = 35V	5.0		m A
Current Limit	I _{EL}	(V _N - V _{OUT}) 10V	3.0		A
		(V _N - V _{OUT}) = 30V	0.3		A

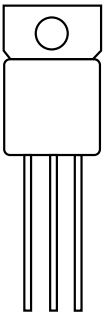
Notes:

- 1. Unless otherwise specified, these specifications apply for (V_N -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
TO-257AA



PIN CONNECTION



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

1 2 3