TECHNICAL DATA
DATA SHEET 840, REV. C
Formerly part number SHD52611

# POSITIVE ADJUSTABLE 1.5 AMP REGULATOR

#### **FEATURES:**

- ISOLATED HERMETIC PACKAGE
- SIMILAR to INDUSTRY TYPE LM117HV
- Add Suffix "S" for S-100 Screening

## **MAXIMUM RATINGS**

All ratings are at -55°C  $\leq T_{A} \leq$  +125°C unless otherwise specified.

Parameter	Conditions	Typical	Limit	Units
Output Current I <sub>OUT</sub>	-	-	1.5	Α
Input to Output Voltage Differential	-	-	+60, -0.3	Vdc
Storage Temperature Range	-	-	-65 to +150	°C
Lead Temperature	Soldering, 10 seconds	-	+300	°C
Power Dissipation (P <sub>D</sub> )	-	-	Internally Limited	
Maximum Thermal Resistance Junction to Case (θ JC)	-	-	4.2	°C/W
Junction Temp. (T <sub>J</sub> )	-	-	+150	°C
Ambient Operating Temperature Range (T <sub>A</sub> )	Recommended Conditions	-	-55 to +125	°C

## **ELECTRICAL CHARACTERISTICS**

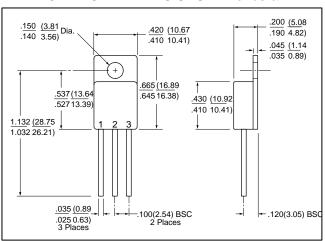
Parameter	Conditions	Min	Тур.	Limit	Units
Reference Voltage	$3.0V \le (V_{IN} - V_{Out}) \le 60V$ $10 \text{ mA} \le I_{OUT} \le I_{MAX} P \le P_{MAX}$	1.20	1.250	1.30	V
Line Regulation	$3.0V \le (V_{IN} - V_{OUT}) \le 60V$ $I_L = 10mA$	-	0.02	0.05	%/V
Load Regulation	$10\text{mA} \le I_{\text{OUT}} \le I_{\text{MAX}}, T_{\text{J}} = +25^{\circ}\text{C}$	-	0.3	1.0	%
Adjust Pin Current	-	-	50	100	μА
Adjust Pin Current Change	$10\text{mA} \le I_{\text{OUT}} \le I_{\text{MAX}}$ $3.0\text{V} \le (V_{\text{IN}} - V_{\text{OUT}}) \le 60\text{V}$	-	0.2	5.0	μΑ
Minimum Load Current	$(V_{IN} - V_{OUT}) = 60V$	-	3.5	7.0	mA
Current Limit	(V <sub>IN</sub> - V <sub>OUT</sub> ) ≤ 15V	1.5	2.2	3.5	Α
Temperature Stability	$T_{MIN} \le T_{J} \le T_{MAX}$	-	1.0	-	%
Ripple Rejection Ratio	$V_{OUT} = 10V, f = 120Hz,$ $C_{ADJ} = 10\mu F$	66	65 80	-	dB
Thermal Regulation	20 ms pulse, T <sub>J</sub> = 25°	-	0.03	0.07	%/W
Long Term Stability	$T_J = +125^{\circ}C$ , $t = 1,000$ hrs	-	0.3	1.0	%

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### DATASHEET 840 REVISION C

#### **MECHANICAL DIMENSIONS in inches & mm**



**TO-257** 

#### **PINOUT TABLE**

TYPE	PIN 1	PIN 2	PIN 3
TO - 257, 1.5A Regulator	ADJUST	Vout	$v_{IN}$

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