

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 $-55^{\circ}\text{C} \leq T_A \leq +125^{\circ}\text{C}$ unless otherwise specified.

Parameter	Conditions	Typical	Limit	Units
Output Current I_{OUT}	-	-	1.5	A
Input to Output Voltage Differential	-	-	+60, -0.3	Vdc
Storage Temperature Range	-	-	-65 to +150	$^{\circ}\text{C}$
Lead Temperature	Soldering, 10 seconds	-	+300	$^{\circ}\text{C}$
Power Dissipation (P_D)	-	-	Internally Limited	
Maximum Thermal Resistance Junction to Case (θ_{JC})	-	-	4.2	$^{\circ}\text{C}/\text{W}$
Junction Temp. (T_J)	-	-	+150	$^{\circ}\text{C}$
Ambient Operating Temperature Range (T_A)	Recommended Conditions	-	-55 to +125	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

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

PINOUT TABLE

TYPE	PIN 1	PIN 2	PIN 3
TO - 257, 1.5A Regulator	ADJUST	V_{OUT}	V_{IN}

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