## SENSITRON SEMICONDUCTOR

TECHNICAL DATA DATA SHEET 967, REV. A

# 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  $T_{\mbox{\scriptsize A}}$  = 25°C unless otherwise specified.

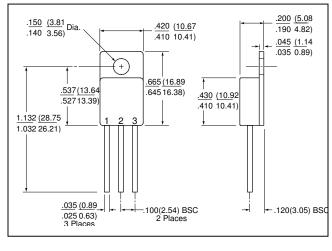
Parameter	Conditions	Typical	Limit	Units
Output Current I <sub>OUT</sub>	-	-	1.5	A
Input to Output Voltage Differential	-	-	60	Vdc
Storage Temperature Range	-	-	-65 to +150	°C
Lead Temperature	Soldering, 10 seconds	-	+300	°C
Power Dissipation $(P_D)$	-	-	Internally Limited	W
Maximum Thermal Resistance Junction to Case ( $\theta_{JC}$ )	-	-	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	$\begin{array}{l}  V_{\text{IN}}-V_{\text{OUT}} =3.0V\\ 3.0V \leq V_{\text{IN}} \text{-} V_{\text{OUT}} \leq 60V \end{array}$	1.20	1.250	1.30	V
	$\begin{array}{l} 10 \mbox{ mA} \leq I_{OUT} \leq I_{MAX} \mbox{ P} \leq P_{MAX} \\ T_A = +25^{\circ}C \end{array}$				
Line Regulation	$\begin{array}{l} 3.0V \leq V_{\text{IN}} \ \text{-} \ V_{\text{OUT}} \leq 40V \\ I_{\text{OUT}} = 10mA \end{array}$	-	-	9.0	mV
Load Regulation	$10mA \le I_{OUT} \le I_{MAX}$	-	-	15	mV
Adjust Pin Current	-	-	50	100	μ <b>A</b>
Adjust Pin Current Change	$\begin{array}{l} 10mA \leq I_L \leq I_{MAX} \\ 3.0V \leq V_{IN} \ - \ V_{OUT} \leq 60V \end{array}$	-	0.2	5.0	μΑ
Minimum Load Current	$V_{IN} - V_{OUT} = 60V$	-	3.5	7.0	mA
Current Limit	$V_{IN}$ - $V_{OUT} \le 15V$	1.5	2.2	3.5	A
Temperature Stability	$T_{MIN} \leq T_J \leq T_{MAX}$	-	1.0	-	%
Ripple Rejection Ratio	V <sub>OUT</sub> = 10V, f = 120Hz,		65	-	dB
	$C_{ADJ} = 10 \mu F$	66	80		
Thermal Regulation	20 ms pulse, $T_j = 25^\circ$	-	-	2.0	mV
Long Term Stability	T <sub>1</sub> = +125°C, t = 1,000hrs	-	0.3	1.0	%

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#### SENSITRON DATASHEET 967 REVISION A



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

<u>TO-257</u>

### **PINOUT TABLE**

ТҮРЕ	PIN 1	PIN 2	PIN 3
TO - 257, 1.5A Regulator	ADJUST	VOUT	V <sub>IN</sub>



#### **TECHNICAL DATA**

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