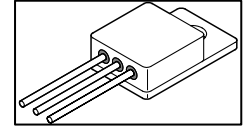


**TECHNICAL DATA**  
**DATA SHEET 305, REV. A**  
Formerly Part Number SHD52612

## NEGATIVE ADJUSTABLE 1.5 AMP REGULATOR

### FEATURES:

- ISOLATED HERMETIC PACKAGE
- SIMILAR to INDUSTRY TYPE LM137



### MAXIMUM RATINGS

All ratings are at  $T_A = 25^\circ\text{C}$  unless otherwise specified.

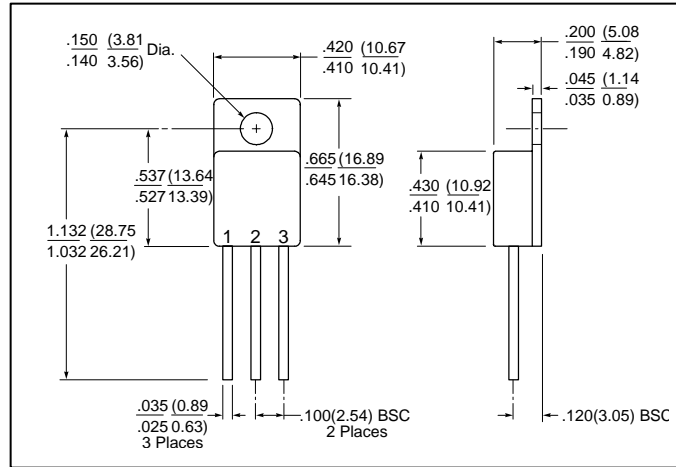
Parameter	Conditions	Typical	Limit	Units
Output Current $I_{OUT}$	-	-	1.5	A
Input to Output Voltage Differential	-	-	40	Vdc
Storage Temperature Range	-	-	-65 to +150	$^\circ\text{C}$
Lead Temperature	Soldering, 10 seconds	-	+300	$^\circ\text{C}$
Power Dissipation ( $P_D$ )	-	-	Internally Limited	W
Maximum Thermal Resistance Junction to Case ( $\theta_{JC}$ )	-	-	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 +150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Min	Typ.	Limit	Units
Reference Voltage	$3.0\text{V} \leq  V_{IN} - V_{OUT}  \leq 40\text{V}$ $10\text{ mA} \leq I_{OUT} \leq I_{MAX}$ $P \leq P_{MAX}$ $T_A = +25^\circ\text{C}$	-1.225	-1.250	-1.275	V
Line Regulation ( $V_{RLINE}$ )	$3.0\text{V} \leq  V_{IN} - V_{OUT}  \leq 40\text{V}$ $I_{OUT} = 10\text{mA}$	-	.01	0.02	%/V
Load Regulation ( $V_{RLOAD}$ )	$10\text{mA} \leq I_{OUT} \leq I_{MAX}$	-	0.3	1.0	%
Adjust Pin Current	-	-	65	100	$\mu\text{A}$
Adjust Pin Current Change	$10\text{mA} \leq I_L \leq I_{MAX}$ $3.0\text{V} \leq V_{IN} - V_{OUT} \leq 40\text{V}$	-	2.0	5.0	$\mu\text{A}$
Minimum Load Current	$ V_{IN} - V_{OUT}  = 40\text{V}$ $ V_{IN} - V_{OUT}  \leq 10\text{V}$	-	2.5 1.2	5.0 3.0	mA
Current Limit	$ V_{IN} - V_{OUT}  \leq 15\text{V}$ $ V_{IN} - V_{OUT}  = 40\text{V}$	1.5 0.24	2.2 0.4	3.5 1.8	A
Temperature Stability	$-55^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$	-	0.6	-	%
Ripple Rejection Ratio	$V_{OUT} = 10\text{V}$ , $f = 120\text{Hz}$ , $C_{ADJ} = -0\mu\text{F}$	66	60 77	-	dB
Thermal Regulation	10 ms pulse, $T_j = 25^\circ$	-	.002	0.02	%/W
Long Term Stability	$T_J = +125^\circ\text{C}$ , $t = 1,000\text{hrs}$	-	0.3	1.0	%

**SENSITRON**  
**DATASHEET 305**  
**REVISION A**

**MECHANICAL DIMENSIONS in inches & mm**



**TO-257**

**PINOUT TABLE**

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

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