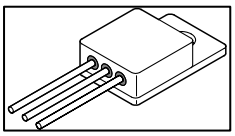
SENSITRON SEMICONDUCTOR

SHD526040

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°C unless otherwise specified.

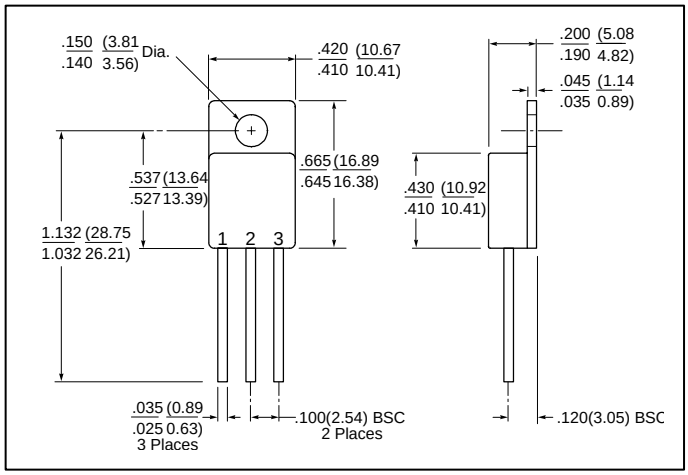
Parameter	Conditions	Typical	Limit	Units
Output Current I_{OUT}	-	-	1.5	A
Input to Output Voltage Differential	-	-	40	Vdc
Storage Temperature Range	-	-	-65 to +150	°C
Lead Temperature	Soldering, 10 seconds	-	+300	°C
Power Dissipation (P_D)	-	-	Internally Limited	W
Maximum Thermal Resistance Junction to Case (θ_{JC})	-	-	4.2	°C/W
Junction Temp. (T_J)	-	-	+150	°C
Ambient Operating Temperature Range (T_A)	Recommended Conditions	-	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

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