

TECHNICAL DATA
DATA SHEET 182, REV. A
Formerly part number SHD52620

NEGATIVE ADJUSTABLE 3.0 AMP REGULATOR

FEATURES:

- ISOLATED HERMETIC PACKAGE
- SIMILAR to INDUSTRY TYPE LT1033M

MAXIMUM RATINGS

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

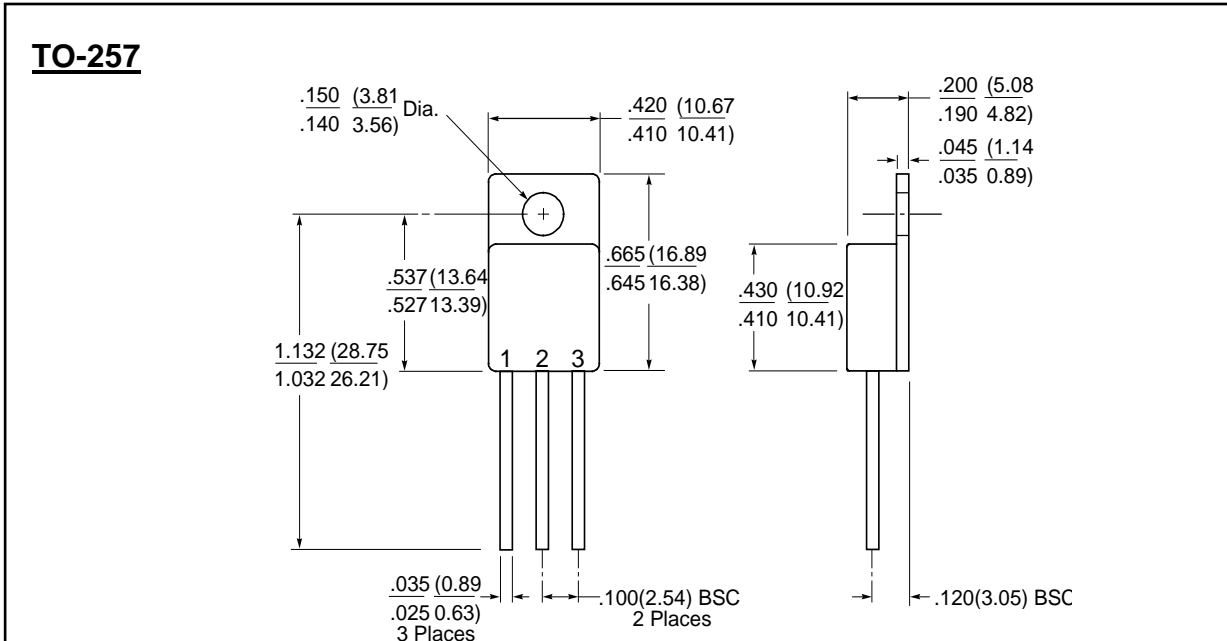
Parameter	Conditions	Typical	Limit	Units
Input to Output Voltage Differential	-	-	35	Vdc
Storage Temperature Range	-	-	-65 to +150	$^\circ\text{C}$
Lead Temperature	Soldering, 10 seconds	-	+300	$^\circ\text{C}$
Power Dissipation (P_D)	-	-	Internally Limited	W
Maximum Thermal Resistance Junction to Case (θ_{JC})	-	-	3.5	$^\circ\text{C}/\text{W}$
Maximum Junction Temperature (T_J)	-	-	-65 to +150	$^\circ\text{C}$
Ambient Operating Temperature Range (T_A)	Recommended Conditions	-	-55 to +125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Min	Limit	Units
Reference Voltage (V_{REF})	$V_{IN} - V_{OUT} = 5.0\text{V}, I_{OUT} = 5.0\text{mA}, T_A = +25^\circ\text{C}$	-1.238	-1.262	V
Line Regulation (V_{RLINE}) $\frac{\Delta V_{OUT}}{\Delta V_{IN}}$	$3.0\text{V} \leq V_{IN} - \Delta V_{OUT} \leq 35\text{V}$	-	0.015	%/V
Load Regulation (V_{RLOAD}) $\frac{\Delta V_{OUT}}{\Delta I_{OUT}}$	$10\text{ mA} \leq I_{OUT} \leq I_{MAX}, V_{OUT} \leq 5.0\text{V}$ $10\text{ mA} \leq I_{OUT} \leq I_{MAX}, V_{OUT} \geq 5.0\text{V}$	-	50 1.0	mV %
Adjust Pin Current I_{ADJ}	$V_{DIF} = 35\text{V}, I_L = 10\text{mA}$	-	100	μA
Adjust Pin Current Change ΔI_{ADJ}	$3.0\text{V} \leq V_{IN} - \Delta V_{OUT} \leq 35\text{V}$	-	2.0	μA
Minimum Load Current I_{MIN}	$V_{IN} - V_{OUT} \leq 35\text{V}$ $V_{IN} - V_{OUT} \leq 10\text{V}$	-	5.0 3.0	mA
Current Limit I_{CL}	$V_{IN} - V_{OUT} \leq 10\text{V}$ $V_{IN} - V_{OUT} \leq 35\text{V}$	3.0 0.5	6.0 25	A
Temperature Stability $\Delta V_{OUT} / \Delta t$	$-55^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$	-	1.5	%
Ripple Rejection ($\Delta V_{IN} / \Delta V_{REF}$)	$V_{OUT} = -10\text{V}, f = 120\text{Hz}$ $C_{ADJ} = 0$ $V_{OUT} = -10\text{V}, f = 120\text{Hz}$ $C_{ADJ} = 10\mu\text{F}$	56 70	-	dB
Thermal Regulation	10 ms pulse	-	0.02	%/W
Long Term Stability ($\Delta V_{OUT} / \Delta t$)	$T_A = 25^\circ\text{C}, t = 1,000$	-	1.0	%

DATASHEET 182
REVISION A

MECHANICAL DIMENSIONS



PINOUT TABLE

TYPE	PIN 1	PIN 2	PIN 3
TO - 257, 3.0A Regulator	ADJUST	V _{IN}	V _{OUT}

DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.