

TECHNICAL DATA
DATA SHEET 891, REV. A
Formerly part number SHD51923

FIXED NEGATIVE 1.5 AMP 15 VOLT REGULATOR

FEATURES:

- CERAMIC HERMETIC PACKAGE
- SIMILAR to INDUSTRY TYPE 7915

MAXIMUM RATINGS

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

Parameter	Conditions		Maximum	Units
Input Voltage	$V_O = 15\text{V}$	-	35	Vdc
Ambient Operating Temperature Range (T_A)	-	-	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	-	-	-65 to +150	$^\circ\text{C}$
Thermal Resistance ($R_{\theta\text{JC}}$)	-	-	4.2	$^\circ\text{C/W}$
Rated Power	$T_C = +25^\circ\text{C}$	-	30	W

ELECTRICAL CHARACTERISTICS

Symbo	Parameter	Conditions	Min.	Typ.	Max.	Units
V_O	Output Voltage	$T_J = 25^\circ\text{C}$	-15.15	-15.0	-14.85	V
		$5\text{ mA} \leq I_O \leq 1\text{A}$ $P \leq 15\text{W}$	-15.75		-14.25	V
V_{RLINE}	Line Regulation	$T_J = 25^\circ\text{C}$, $V_{\text{IN}} = -17.5\text{V to } -30\text{V}$	-	5.0	25	mV
		$V_{\text{IN}} = -20\text{V to } -26\text{V}$	-	3.0	15	mV
V_{RLOAD}	Load Regulation	$T_J = 25^\circ\text{C}$	-	-	35	mV
		$5\text{ mA} \leq I_O \leq 1.5\text{A}$ $250\text{ mA} \leq I_O \leq 750\text{mA}$	-	-	21	mV
I_Q	Quiescent Current	$T_J = 25^\circ\text{C}$	-	-	6.0	mA
ΔI_Q	Quiescent Current Change	With Line	-	-	0.8	mA
		With Load, $5\text{ mA} \leq I_O \leq 1\text{A}$	-	-	0.5	mA
V_{DO}	Dropout Voltage	$T_J = 25^\circ\text{C}$, $I_O = 1\text{A}$	-	-	2.5	V
I_{OMAX}	Peak Output Current	$T_J = 25$	1.5	-	3.3	A
I_{OS}	Short Circuit Current	$V_{\text{IN}} = -35\text{V}$	-	-	1.2	A
		$T_C = 25^\circ\text{C}$ $-55^\circ\text{C} \leq T_C \leq +125^\circ\text{C}$	-	-	2.8	A
$\frac{\Delta V_{\text{IN}}}{\Delta V_{\text{OUT}}}$	Ripple Rejection	$f = 120\text{Hz}$	54	70	-	dB
N_o	Output Noise Voltage	$T_A = 25^\circ\text{C}$, $f = 10\text{Hz} \leq f \leq 100\text{kHz}$	-	375	-	$\mu\text{V rms}$
$\frac{\Delta V_{\text{OUT}}}{\Delta t}$	Long Term Stability	$T_C = 25^\circ\text{C}$, $t = 1000\text{ hours}$	-	-	150	mV

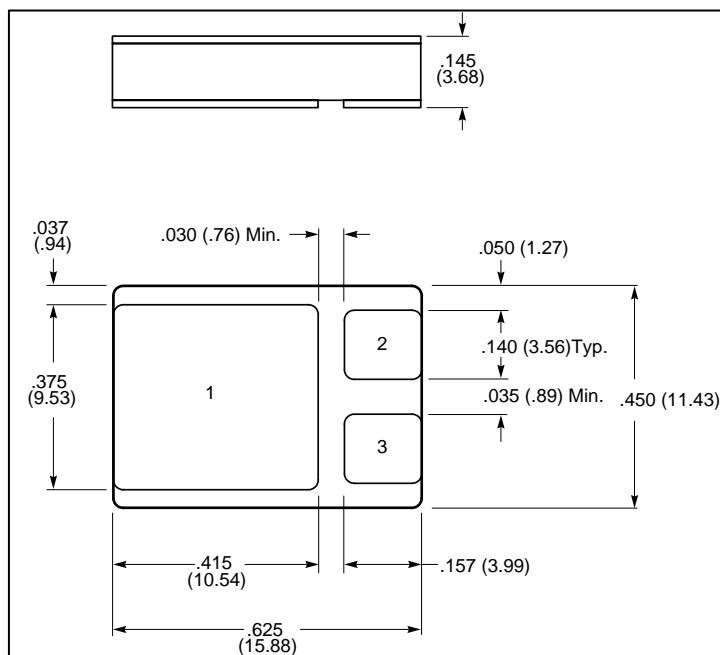
Note: Conditions unless otherwise noted: $I_{\text{OUT}} = 500\text{ mA}$, $C_{\text{IN}} = 2.2\ \mu\text{F}$, $C_{\text{OUT}} = 1\ \mu\text{F}$, $0^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$, Power Dissipation = 1.5W.

SENSITRON

TECHNICAL DATA

DATA SHEET 891, REV. A

MECHANICAL DIMENSIONS: In inches / mm



LCC-3P

PINOUT TABLE

TYPE	PIN 1	PIN 2	PIN 3
LCC-3P, -15V Regulator	V_{IN}	GROUND	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.