TECHNICAL DATA
DATA SHEET 202, REV -

FIXED NEGATIVE 5.0 VOLT 1.5 AMP REGULATOR

FEATURES:

- **ISOLATED HERMETIC PACKAGE**
- **SIMILAR to INDUSTRY TYPE LM7905A**

MAXIMUM RATINGS

All ratings are at T_A = 25°C unless otherwise specified.

Parameter	Conditions	Typical	Limit	Units
Input Voltage	-	-	-35	Vdc
Storage Temperature Range	-	-	-65 to +150	°C
Lead Temperature	Soldering, 10 seconds	-	+300	°C
Power Dissipation (P_D)	T_C = +25°C T_A = +25°C	- -	15 3.0	W W
Maximum Thermal Resistance Junction to Case (θ_{JC})	-	-	4.2	°C/W
Maximum Thermal Resistance Junction to Ambient (θ_{JA})	-	-	42	°C/W
Maximum Junction Temperature (T_J)	I_O = 5.0 mA to 1.0 A	-	150	°C
Ambient Operating Temperature Range (T_A)	-	-	-55 to +125	°C
Input Voltage Range Recommended	-	-	-6.5 to -25	Vdc

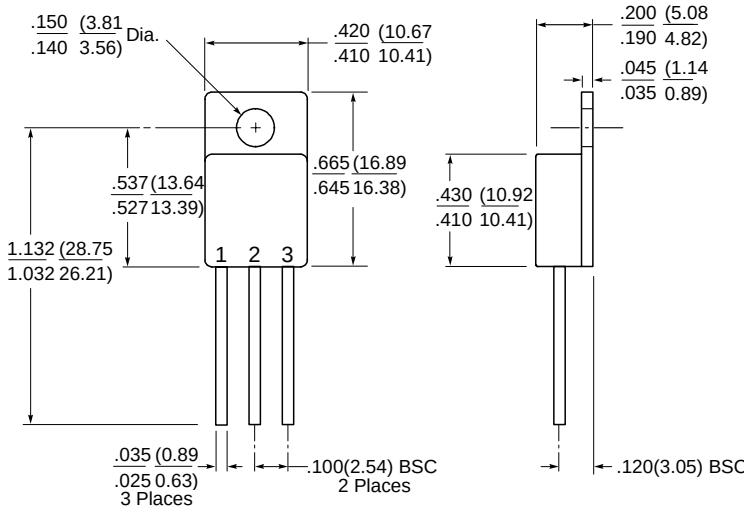
ELECTRICAL CHARACTERISTICS

Parameter	Conditions	Typical	Limit	Units
Output Voltage (V_{OUT})	T_A = +25°C	-5.00	-4.95 -5.05	V V
Line Regulation (V_{RLINE})	-55°C ≤ T_J ≤ +125°C V_{IN} = -25V to -7V	-	20	mV
Load Regulation (V_{RLOAD})	-55°C ≤ T_J ≤ +125°C I_O = 5.0 mA to 1.5 A	-	32	mV
Standby Current Drain (I_{SCD})	-	-	3.5	mA
Standby Current Drain Change w/Line (ΔI_{SCD}) (Line)	V_{IN} = -25 V to -7.0 V	-	0.8	mA
Standby Current Drain Change w/Load (ΔI_{SCD}) (Load)	I_O = 5.0 mA to 1000 mA	-	0.5	mA
Dropout Voltage (V_{DO})	I_O = 1.0A	-	1.1	V
Peak Output Current ($I_{O(pk)}$)	T_A = +25°C	-	3.3	A
Short Circuit Current (I_{OS})	V_{IN} = -35V	-	1.2	A
Ripple Rejection (ΔV_{IN} / ΔV_{OUT})	f_O = 120 kHz, V_{IN} = 10V I_O = 5.0mA	56	-	dB
Output Noise Voltage (N_O)	T_A = +25°C 10 Hz - 100kHz	-	40	μV_{rms}
Long Term Stability (ΔV_{OUT} / Δt)	T_A = 25°C, t = 1,000	-	120	mV

Note: Output Voltage tolerance; +/- 1% @ 25° C, +/- 2% from -55° to +80° C

MECHANICAL DIMENSIONS

TO-257



PINOUT TABLE

TYPE	PIN 1	PIN 2	PIN 3
TO - 257, -5V Regulator	GROUND	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.