

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 $T_A = 25^\circ\text{C}$ unless otherwise specified.

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

ELECTRICAL CHARACTERISTICS

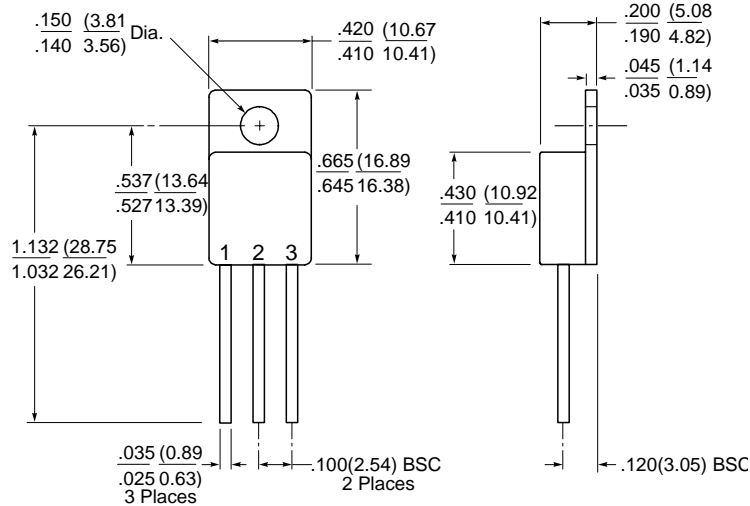
| Parameter | Conditions | Typical | Limit | Units |
|--|--|---------|----------------|---------------------|
| Output Voltage (V_{OUT}) | $T_A = +25^\circ\text{C}$ | -5.00 | -4.95 -5.05 | V V |
| Line Regulation (V_{RLINE}) | $-55^\circ\text{C} \leq T_J \leq +125^\circ\text{C}$ $V_{IN} = -25\text{V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

Note: Output Voltage tolerance; +/- 1% @ 25°C , +/- 2% from -55° to $+80^\circ\text{C}$

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MECHANICAL DIMENSIONS

TO-257



PINOUT TABLE

| TYPE | PIN 1 | PIN 2 | PIN 3 |
|-------------------------|--------|-----------------|------------------|
| TO - 257, -5V Regulator | GROUND | V _{IN} | V _{OUT} |

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