

## STANDARD APPLICATION



Standard applications require that the regulator be connected to ground. The output of the regulator is a negative voltage. The output voltage is determined by the value of the output filter capacitor (C2) and the load current (IL). The output voltage is also affected by the input filter capacitor (C1) and the input voltage (VI).

NOTE: These regulators are not recommended for use in applications where the input voltage is less than 1.5 V.

NOTE: The output voltage of the regulator is affected by the load current (IL) and the input voltage (VI). The output voltage is also affected by the input filter capacitor (C1) and the output filter capacitor (C2).

## Output Voltage +25°C

5.2 V typ (MC7905) (2)

2 V typ (MC7902)

## Load Regulation

$r_{L} \leq +25^{\circ}\text{C}$ , 50 mA  $\leq I_{O} \leq 1.5$  A

12 mV typ

250 mA  $\leq I_{O} \leq 750$  mA

4.5 mV typ

Output Noise Voltage ( $T_{A} = +25^{\circ}\text{C}$ , 10 Hz  $\leq f \leq 100$  KHz)

42  $\mu\text{V}$  typ



K SUFFIX

TO-3, Plastic Case

CASE 1161

Pin 1 GND



P SUFFIX

TO-220, Plastic Case

CASE 199-04



## Negative Voltage Regulators

The MC7900C Series of fixed output negative voltage regulators are intended as complements to the popular MC7800C Series devices. These negative regulators are available in the same seven-voltage options as the MC7800C devices. In addition, two extra voltage options commonly employed in MECL systems are also available in the negative MC7900C Series.

Available in fixed output voltage options from  $-2.0$  to  $-24$  volts, these regulators employ current limiting, thermal shut-down, and safe-area compensation — making them remarkably rugged under most operating conditions. With adequate heat-sinking they can deliver output currents in excess of 1.0 ampere.

- No External Components Required
- Internal Thermal Overload Protection
- Internal Short-Circuit Current Limiting
- Output Transistor Safe-Area Compensation
- Packaged in the Plastic Case 199-04 (Pin Compatible with the VERSAWATT or TO-220) Or Hermetic TO-3 Type Metal Power Package.