



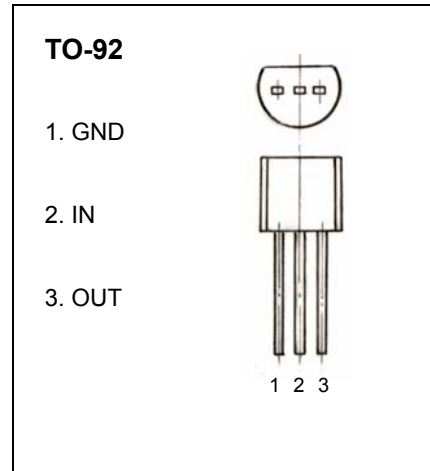
# TIGER ELECTRONIC CO.,LTD

## TO-92 Encapsulate Three-terminal Voltage Regulator

### LM79L05 Three-terminal negative voltage regulator

#### FEATURES

Maximum Output current  
 $I_{OM}$ : 0.1 A  
 Output voltage  
 $V_o$ : -5 V  
 Continuous total dissipation  
 $P_D$ : 0.625 W



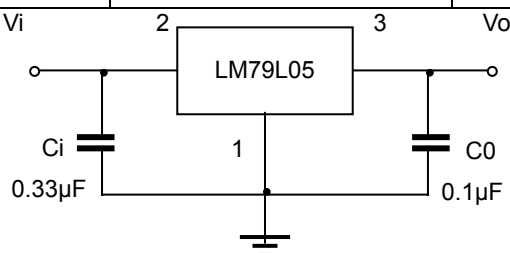
**ABSOLUTE MAXIMUM RATINGS** (Operating temperature range applies unless otherwise specified)

| Parameter                            | Symbol    | Value    | Units |
|--------------------------------------|-----------|----------|-------|
| Input Voltage                        | $V_i$     | -30      | V     |
| Operating Junction Temperature Range | $T_{OPR}$ | 0~+125   | °C    |
| Storage Temperature Range            | $T_{STG}$ | -55~+150 | °C    |

**ELECTRICAL CHARACTERISTICS** ( $V_i=-10V, I_o=40mA, C_i=0.33\mu F, C_o=0.1\mu F$ , unless otherwise specified )

| Parameter                | Symbol       | Test conditions             | MIN                                     | TYP   | MAX  | UNIT  |   |
|--------------------------|--------------|-----------------------------|---|-------|------|-------|---|
| Output voltage           | $V_o$        | 25°C                        | -4.8                                    | -5.0  | -5.2 | V     |   |
|                          |              | 0-125°C                     | -7V ≤ $V_i$ ≤ -20V, $I_o=1mA \sim 40mA$ | -4.75 | -5.0 | -5.25 | V |
|                          |              |                             | $I_o=1mA \sim 70mA$                     | -4.75 | -5.0 | -5.25 | V |
| Load Regulation          | $\Delta V_o$ | $I_o=1mA \sim 100mA$        | 25°C                                    | 20    | 60   | mV    |   |
|                          |              | $I_o=1mA \sim 40mA$         | 25°C                                    | 10    | 30   | mV    |   |
| Line regulation          | $\Delta V_o$ | -7V ≤ $V_i$ ≤ -20V          | 25°C                                    | 15    | 150  | mV    |   |
|                          |              | -8V ≤ $V_i$ ≤ -20V          | 25°C                                    | 12    | 100  | mV    |   |
| Quiescent Current        | $I_q$        | 25°C                        |   |       | 6    | mA    |   |
| Quiescent Current Change | $\Delta I_q$ | -8V ≤ $V_i$ ≤ -20V          | 0-125°C                                 |       | 1.5  | mA    |   |
|                          | $\Delta I_q$ | 1mA ≤ $V_i$ ≤ 40mA          | 0-125°C                                 |       | 0.1  | mA    |   |
| Output Noise Voltage     | $V_N$        | 10Hz ≤ f ≤ 100KHz           | 25°C                                    | 40    |      | uV    |   |
| Ripple Rejection         | RR           | -8V ≤ $V_i$ ≤ -18V, f=120Hz | 0-125°C                                 | 41    | 49   | dB    |   |
| Dropout Voltage          | $V_d$        | 25°C                        |   | 1.7   |      | V     |   |

#### TYPICAL APPLICATION



Note : Bypass capacitors are recommended for optimum stability and transient response and should be located as close as Possible to the regulators.

# Typical Characteristics

# LM79LXX

