



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

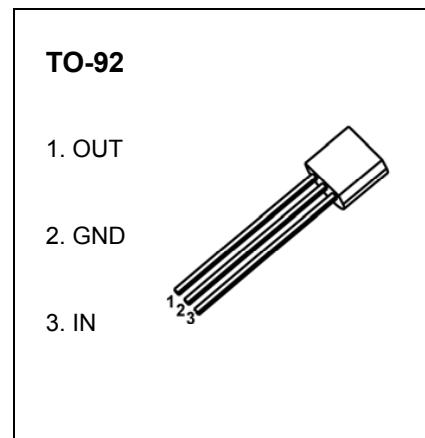
## TO-92 Encapsulate Three-terminal Voltage Regulator

### CJ78L05 Three-terminal positive voltage regulator

#### FEATURES

Maximum Output Current  $I_O$ : 0.1 AOutput Voltage  $V_o$ : 5 V

Continuous Total Dissipation

 $P_D$ : 0.625W ( $T_a=25^\circ C$ )

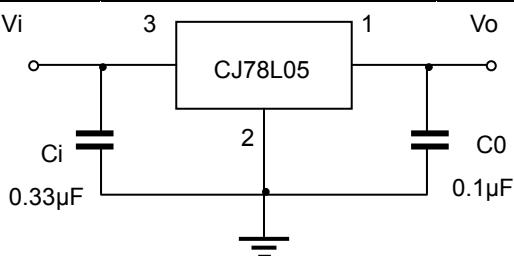
#### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ( $V_i=10V, I_o=40mA, C_i=0.33\mu F, C_o=0.1\mu F$ , unless otherwise specified )

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	$V_o$		25°C	4.8	5.0	V
		$7V \leq V_i \leq 20V, I_o = 1mA \sim 40mA$	0-125°C	4.75	5.0	5.25
		$I_o = 1mA \sim 70mA$		4.75	5.0	V
Load Regulation	$\Delta V_o$	$I_o = 1mA \sim 100mA$	25°C		15	mV
		$I_o = 1mA \sim 40mA$	25°C		8	mV
Line regulation	$\Delta V_o$	$7V \leq V_i \leq 20V$			32	mV
		$8V \leq V_i \leq 20V$	25°C		26	100
Quiescent Current	$I_q$		25°C		3.8	mA
Quiescent Current Change	$\Delta I_q$	$8V \leq V_i \leq 20V$	0-125°C			mA
	$\Delta I_q$	$1mA \leq V_i \leq 40mA$	0-125°C			0.1
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$	25°C		42	uV
Ripple Rejection	$RR$	$8V \leq V_i \leq 20V, f = 120Hz$	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

CJ78L05

