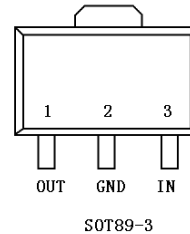


### FEATURES

- Maximum Output current: 0.1A
- Output Voltage: 5V
- Thermal Overload Protection

### PIN CONNECTION



### Absolute Maximum Ratings (Ta=25°C)

Characteristics	Symbol	Value	Unit
Input Voltage	$V_i$	30	V
Power Dissipation	TO-92	625	m W
	SOT-89	350	
	SOP8	500*	
Operating ambient Temperature Range	$T_{opr}$	-25~ +125	°C
Storage Temperature Range	$T_{stg}$	-55~ +150	°C

### ELECTRICAL CHARACTERISTICS

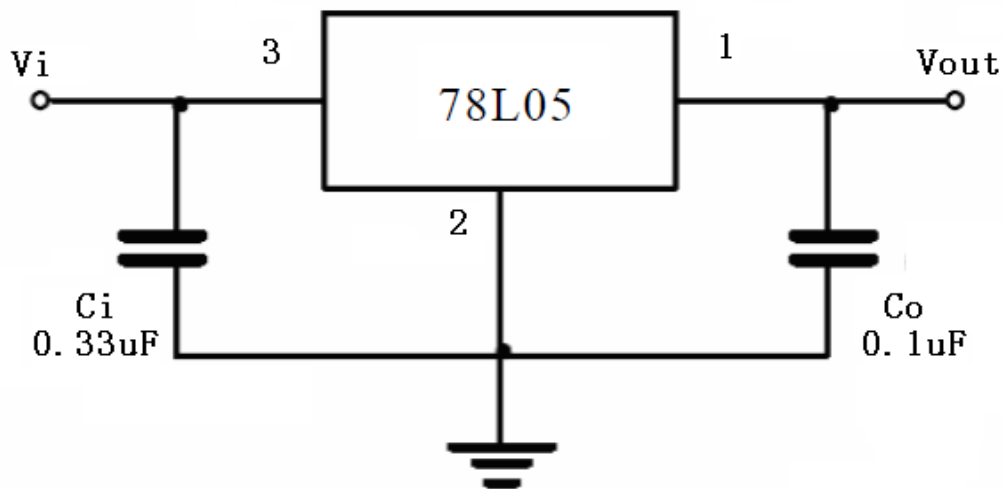
(unless otherwise noted,  $V_i=10V, I_o=40mA, -30<T_j<85^\circ C, C_1=0.33\mu F, C_o=0.1\mu F$ ) (Note1)

Characteristics	Test conditions	Symbol	Min	Typ	Max	Unit
Output Voltage	$T_j=25^\circ C$	$V_o$	4.82	5	5.18	V
	$7V \leq V_i \leq 20V; I_o=1mA \sim 40mA$		4.8		5.2	V
	$7V \leq V_i \leq V_{max}; I_o=1mA \sim 70mA$		4.8		5.2	V (Note2)
Load Regulation	$V_{IN}=10V; I_o=1mA \sim 100mA$	$\Delta V_o$	-60		60	m V
	$V_{IN}=10V; I_o=1mA \sim 40mA$		-30		30	m V
Line Regulation	$I_{OUT}=40mA; 7V \leq V_i \leq 20V$	$\Delta V_o$	-150		150	m V
	$I_{OUT}=40mA; 8V \leq V_i \leq 20V$		-100		100	m V
Quiescent Current		$I_q$			5.5	m A
Quiescent Current Change	$8V \leq V_i \leq 20V$	$\Delta I_q$	-1.5		1.5	m A
	$1mA \leq I_o \leq 40mA$		-0.1		0.1	m A
Ripple Rejection	$10V \leq V_i \leq 20V; f=120Hz; T_j=25^\circ C$	RR	40			d B
Dropout Voltage	$T_j=25^\circ C$	$V_d$		2.2		V
Short Circuit Current Limit	$T_j=25^\circ C$	$I_{sc}$		0.41		V

**Note 1:** The Maximum steady state usable output current and input voltage are very dependent on the heating sinking and/or lead temperature length of the package. The data above represent pulse test conditions with junction temperatures as indicated at the initiation of test.

**Note 2:** Power dissipation  $T_o-92<0.625W, SOT-89<0.35W, SOP8<0.5W$

APPLICATION CIRCUIT



Bypass capacitors  $C_o$  of at least  $0.1\mu\text{F}$  are recommended for optimum stability and transient response. It should be located as close as possible (recommended to be less than 10mm) to the regulators.

OUTLINE DRAWING

