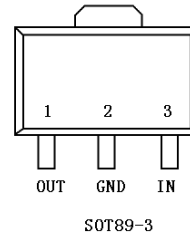


FEATURES

- 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	P_d	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

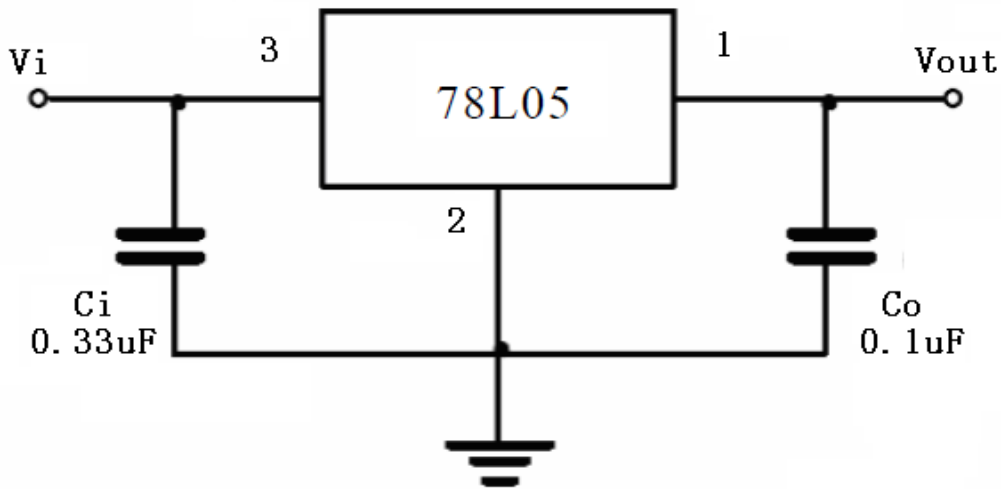
(unless otherwise noted, $V_i=10V, I_o=40mA, -30<T_j<85^\circ C, C_1=0.33\mu F, C_o=0.1\mu F$) (Note1)

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	$V_{IN}=10V; I_o=1mA \sim 100mA$	ΔV_o	-60		60	m V
	$V_{IN}=10V; I_o=1mA \sim 40mA$		-30		30	m V
Line Regulation	$I_{OUT}=40mA; 7V \leq V_i \leq 20V$	ΔV_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	$8V \leq V_i \leq 20V$	ΔI_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 $0.1\mu F$ 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

