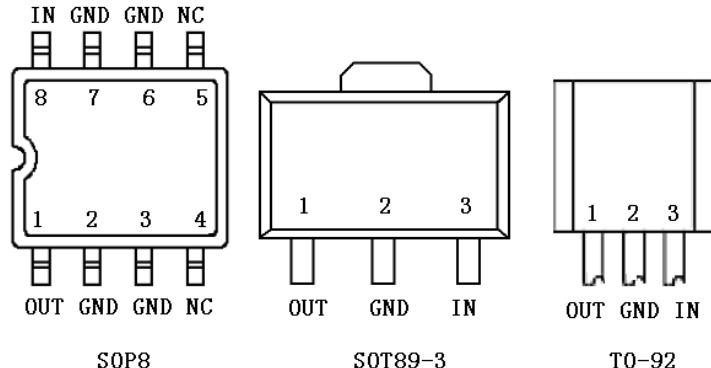


## FEATURES

- Maximum Output current: 0.1A
- Output Voltage: 5V
- Thermal Overload Protection
- 2%Output Voltage Accuracy

## PIN CONNECTION



## Absolute Maximum Ratings (Ta=25°C)

Characteristics	Symbol	Value	Unit
Input Voltage	Vi	35	V
Operating Junction Temperature Range	Tj	-40 ~ +125	°C
Power Dissipation	T0-92	625	m W
	SOT-89	350	
	SOP8	500*	
Operating Temperature Range	Topr	-40 ~ +85	°C
Storage Temperature Range	Tstg	-40 ~ +150	°C

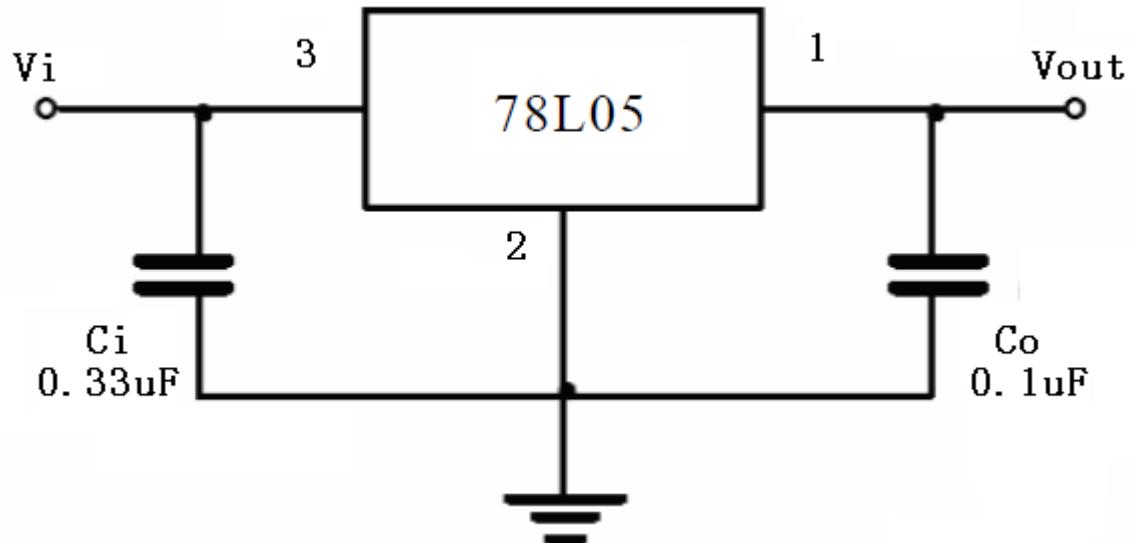
## ELECTRICAL CHARACTERISTICS

(unless otherwise noted, Vi=10V, Io=40mA, -30< Tj < 85°C, C1=0.33μF, Co=0.1μF) (Note1)

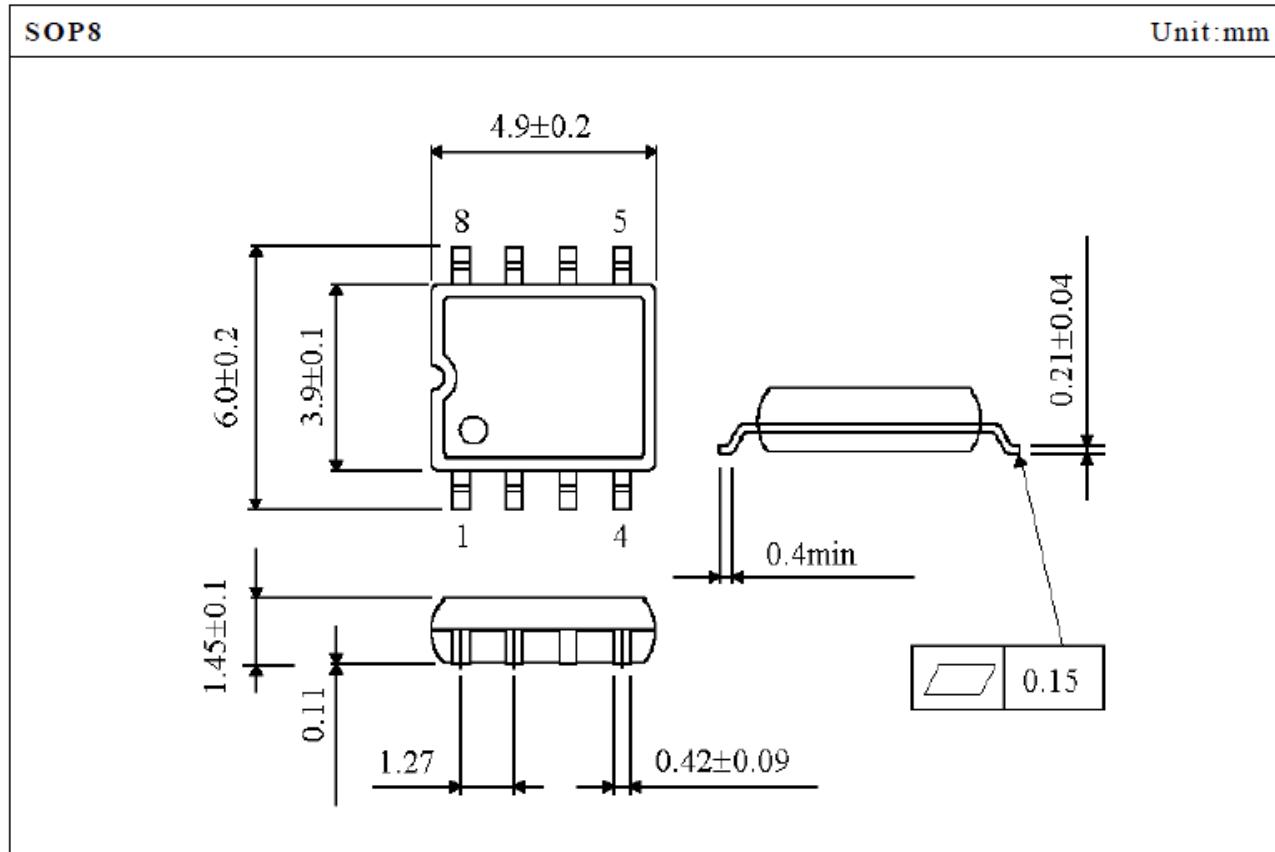
Characteristics	Test conditions	Symbol	Min	Typ	Max	Unit
Output Voltage	Tj=25°C	Vo	4.9	5	5.1	V
	7V≤Vi≤20V; Io=1mA~40mA		4.8		5.2	V
	7V≤Vi≤Vmax; Io=1mA~70mA		4.8		5.2	V (Note2)
Load Regulation	Tj=25°C; Io=1mA~100mA	Δ Vo		11	60	m V
	Tj=25°C; Io=1mA~40mA			5	6	m V
Line Regulation	Tj=25°C; 7V≤Vi≤20V	Δ Vo		8	150	m V
	Tj=25°C; 8V≤Vi≤20V			6	100	m V
Quiescent Current		Iq		2	5.5	m A
Quiescent Current Change	8V≤Vi≤20V	Δ Iq			1.5	m A
	1mA≤Io≤40mA				0.2	m A
Output Noise Voltage	10Hz≤f≤100kHz	VN		40		μ V
Temperature Coefficient of Vo	Io=5mA	Δ Vo/ Δ T		-0.65		mV/°C
Ripple Rejection	10V≤Vi≤20V; f=120Hz; Tj=25°C	RR	41	48		d B
Dropout Voltage	Tj=25°C	Vd		1.7		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 date above represent pulse test conditions with junction temperatures as indicated at the initiation of test.

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

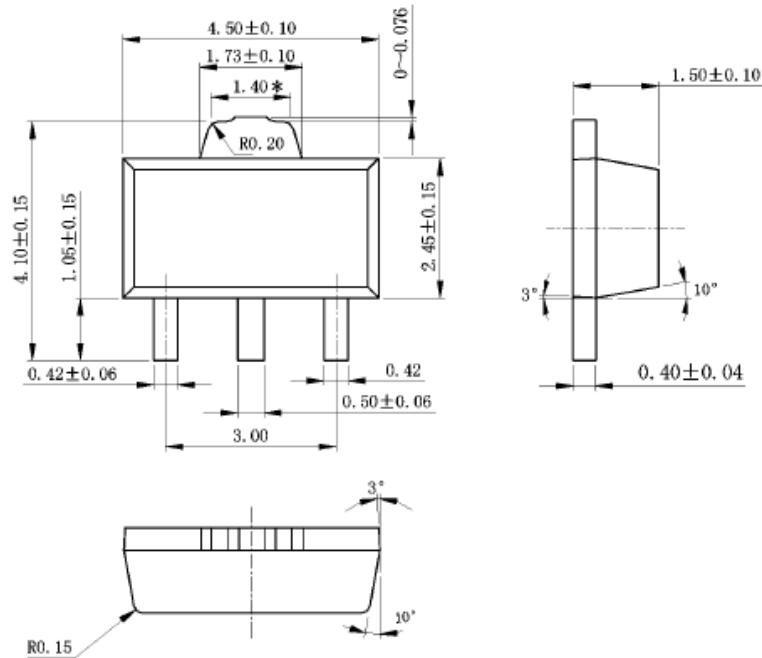
**APPLICATION CIRCUIT**

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

**OUTLINE DRAWING**

**SOT-89-3L**

Unit:mm

**TO-92**

Unit:mm

