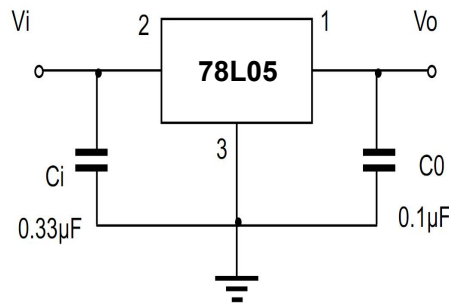


## Three-terminal positive voltage regulator

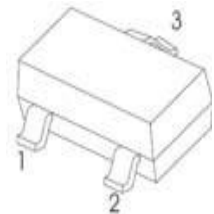
### FEATURES:

- ※ Maximum output current  
**IOM: 0.1A**
- ※ Output voltage  
**VO: 5V**
- ※ Continuous total dissipation  
**PD: 0.25W**

### TYPICAL APPLICATION:



SOT-23



1.OUT  
2.IN  
3.GND

### MARKING: L05

Solid dot = Green molding compound device,  
if none, the normal device.

### Absolute Maximum ratings (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	$V_i$	30	V
Thermal Resistance From Junction to air	$R_{\theta JA}$	160	$^{\circ}C/W$
Operating Junction Temperature Range	TOPR	-40~+125	$^{\circ}C$
Storage Temperature Range	TSTG	-65~+150	$^{\circ}C$

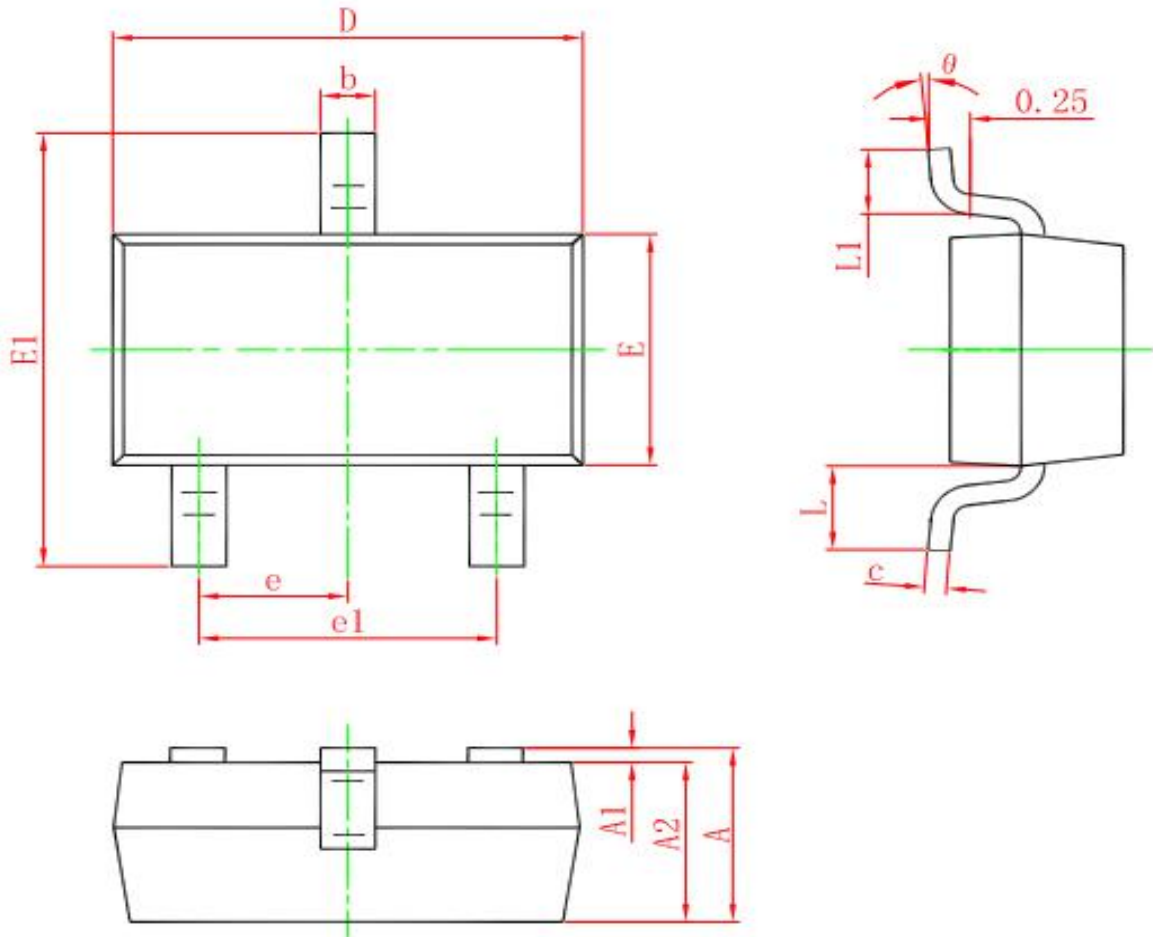
### Electrical Characteristics At Specified Virtual Junction Temperature

( $V_i=10V$ ,  $I_o=40mA$ ,  $C_i=0.33\mu F$ ,  $C_o=0.1\mu F$ . Unless Otherwise Specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit	
Output voltage	$V_O$	$7V \leq V_i \leq 20V, I_o = 1mA - 40mA$	4%	4.8	5	5.2	V
			3%	4.85	5	5.15	V
			2%	4.9	5	5.1	V
Output voltage	$V_O$	$7V \leq V_i \leq 20V, I_o = 1mA - 70mA$	-25~+125	4.8	5	5.25	V
		$7V \leq V_i \leq 20V, I_o = 1mA - 70mA$	-25~+125	4.75	5	5.25	V
Load Regulation	$\Delta V_O$	$I_o = 1mA - 100mA, V_i = 10V$	25 $^{\circ}C$		15	60	mV
		$I_o = 1mA - 40mA, V_i = 10V$	25 $^{\circ}C$		5	30	mV
Line Regulation	$\Delta V_O$	$7V \leq V_i \leq 20V, I_o = 40mA$	25 $^{\circ}C$		32	150	mV
		$8V \leq V_i \leq 20V, I_o = 40mA$	25 $^{\circ}C$		26	100	mV
Quiescent Current	$I_q$		25 $^{\circ}C$		3.8	6	mA
Quiescent Current Change	$\Delta I_q$	$8V \leq V_i \leq 20V, I_o = 40mA$	-25~+125			1.5	mA
	$\Delta I_q$	$1mA \leq I_o \leq 40mA$	-25~+125			0.1	mA
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$	25 $^{\circ}C$		42		$\mu V/V_o$
Ripple Rejection	$R_r$	$8V \leq V_i \leq 20V, f = 120Hz, I_o = 40mA$	-25~+125	41	49		dB
Dropout Voltage	$V_d$	$I_o = 40mA$	25 $^{\circ}C$		1.7		V

Note :

Bypass Capacitors are Recommended For Optimum Stability and Transient Response  
and Should be located as Close as Possible to the Regulators

**SOT-23 PACKAGE OUTLINE DIMENSIONS**


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

单击下面可查看定价，库存，交付和生命周期等信息

[>>YONGYUTAI\(永裕泰\)](#)