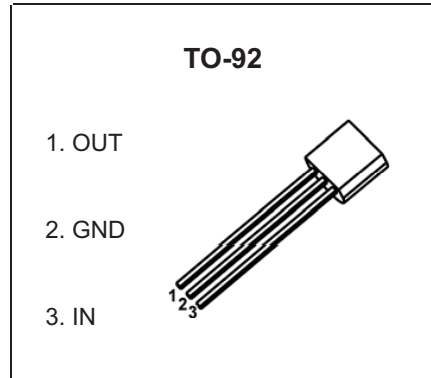




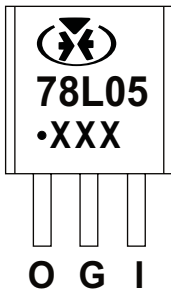
CJ78L05 Three-terminal positive voltage regulator

FEATURES

- Maximum output current
 I_{OM} : 0.1A
- Output voltage
 V_O : 5V
- Continuous total dissipation
 P_D : 0.625 W ($T_a = 25\text{ }^\circ\text{C}$)



MARKING



JX78L05=Device code
 Solid dot=Green molding compound device,
 if none, the normal device
 XXX=Code

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
78L05	TO-92	Bulk	1000pcs/Bag
78L05-TA	O-92	Tape	2000pcs/Box

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 Ambient	$R_{\theta JA}$	160	$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_{OPR}	-40~+125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS

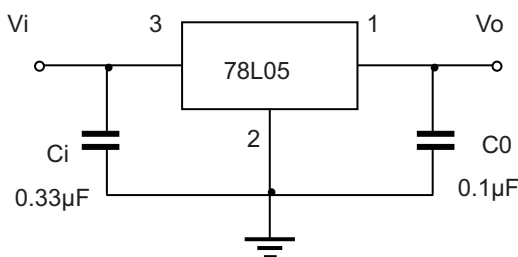
T_a=25 °C unless otherwise specified

(V_i=10V, I_o=40mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output voltage	V _o		25°C	4.80	5.0	5.20	V
				4.85	5.0	5.15	V
				4.90	5.0	5.10	V
			0-125°C	4.75	5.0	5.25	V
	4.75	5.0		5.25	V		
Load Regulation	ΔV _o	I _o =1mA~100mA	25°C		15	60	mV
		I _o =1mA~40mA	25°C		8	30	mV
Line regulation	ΔV _o	7V≤V _i ≤20V			32	150	mV
		8V≤V _i ≤20V	25°C		26	100	mV
Quiescent Current	I _q		25°C		3.8	6	mA
Quiescent Current Change	ΔI _q	8V≤V _i ≤20V	0-125°C			1.5	mA
	ΔI _q	1mA≤I _i ≤40mA	0-125°C			0.1	mA
Output Noise Voltage	V _N	10Hz≤f≤100KHz	25°C		42		μV/V _o
Ripple Rejection	RR	8V≤V _i ≤20V, f=120Hz	0-125°C	41	49		dB
Dropout Voltage	V _d		25°C		1.7		V

* Pulse test.

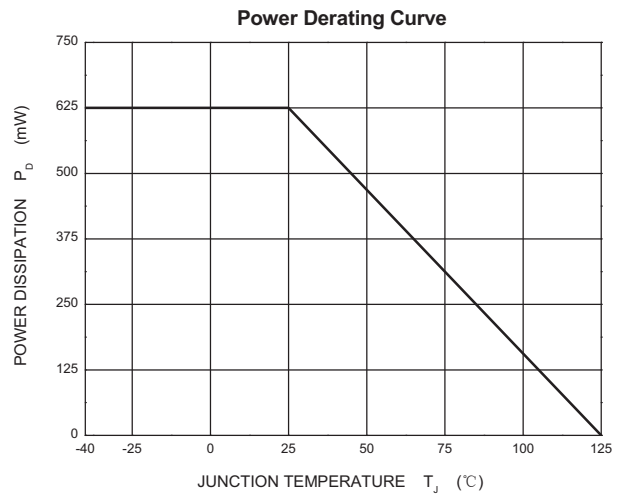
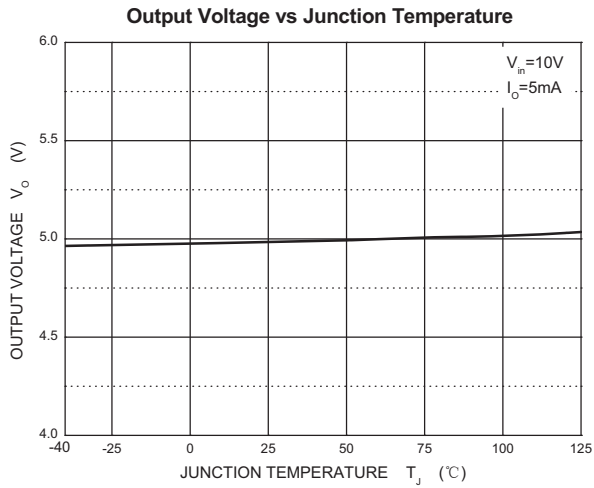
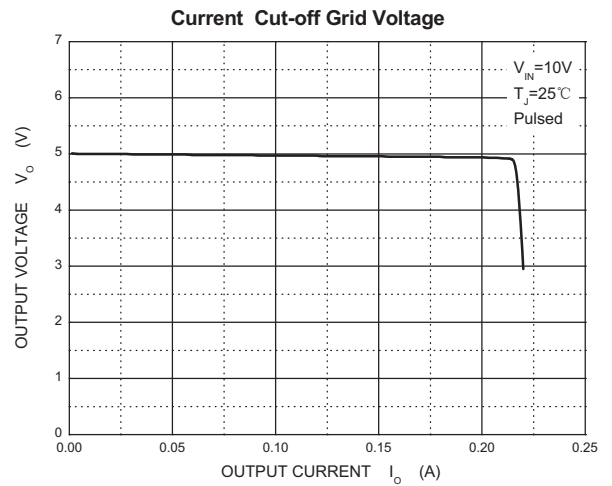
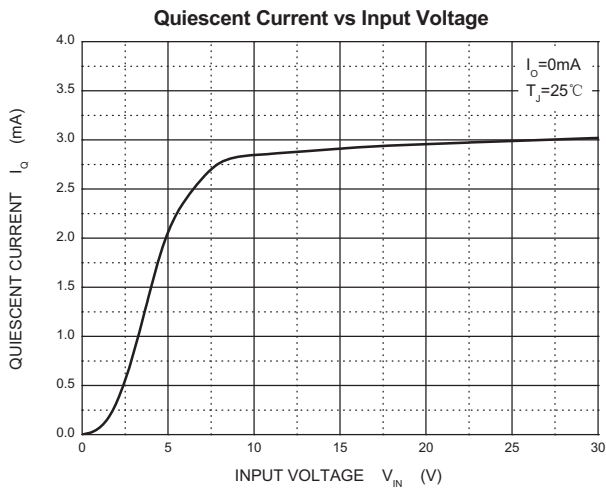
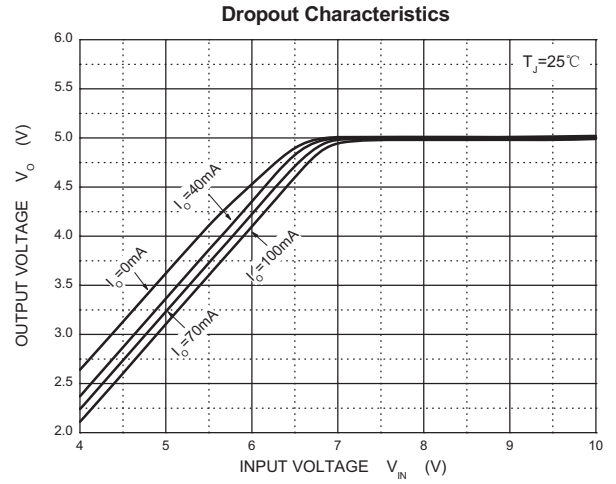
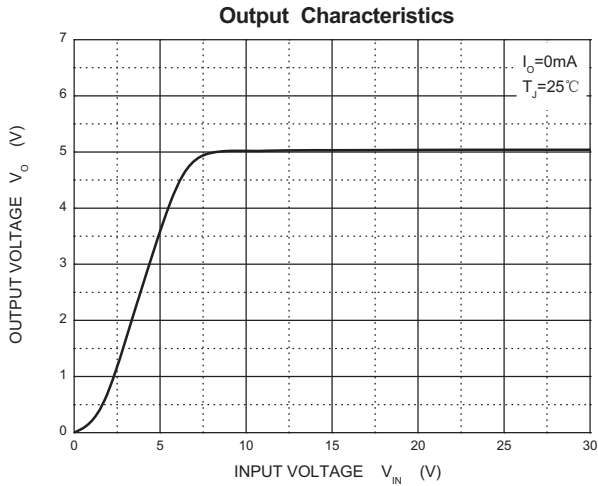
TYPICAL APPLICATION



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

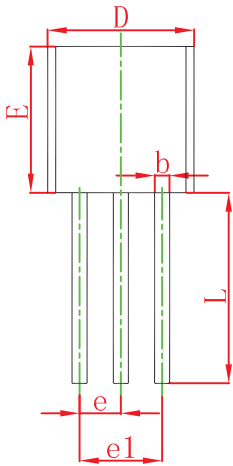
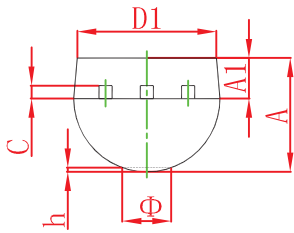


Typical Characteristics



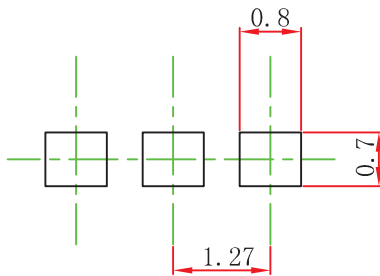


TO-92 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.400	4.700	0.173	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

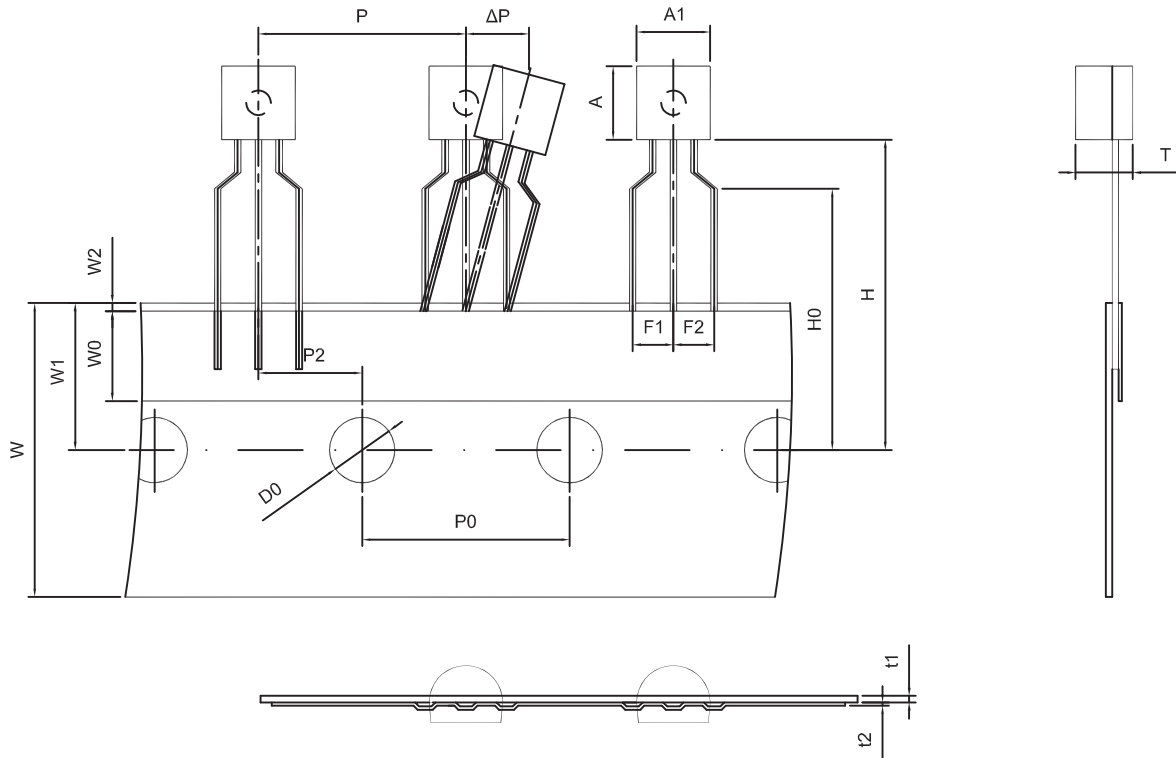
TO-92 Suggested Pad Layout



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05 mm.
 3. The pad layout is for reference purposes only.

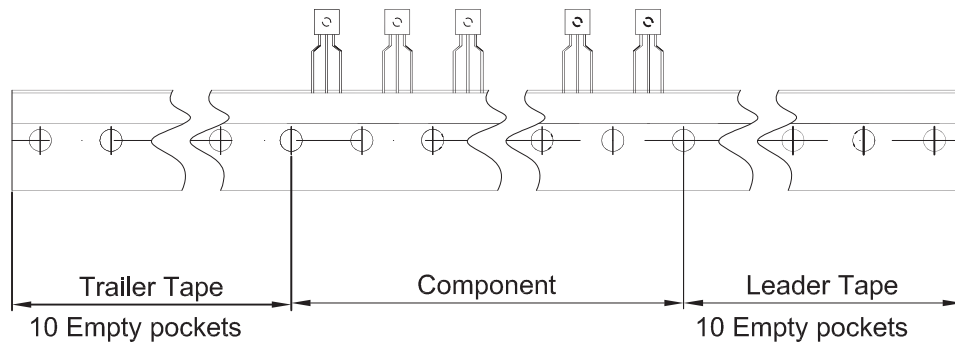


TO-92 PACKAGE TAPEING DIMENSION



Dimiensions are in millimeter

A1	A	T	P	P0	P2	F1	F2	W
4.5	4.5	3.5	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0 MAX.	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	2000 pcs	333×162×43	20,000 pcs	350×340×250

