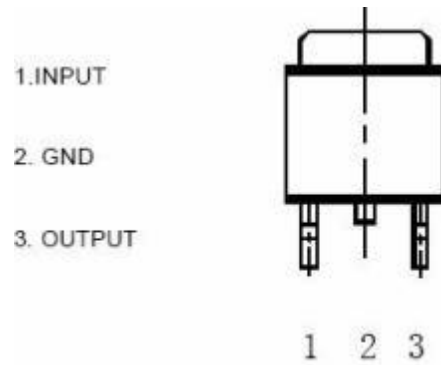


FEATURES

- Output Current in Excess of 0.5A
- Output Voltage is 5V
- Internal thermal Overload protection
- Internal Short Circuit Current Limiting

PIN CONNECTION



ABSOLUTE MAXIMUM RATINGS (Ta=25 °C)

Characteristics	Symbol	Value	Unit
Input Voltage	V_i	7 ~ 36	V
Storage Temperature Range	T_{stg}	-85 ~ 150	°C

ELECTRICAL CHARACTERISTICS

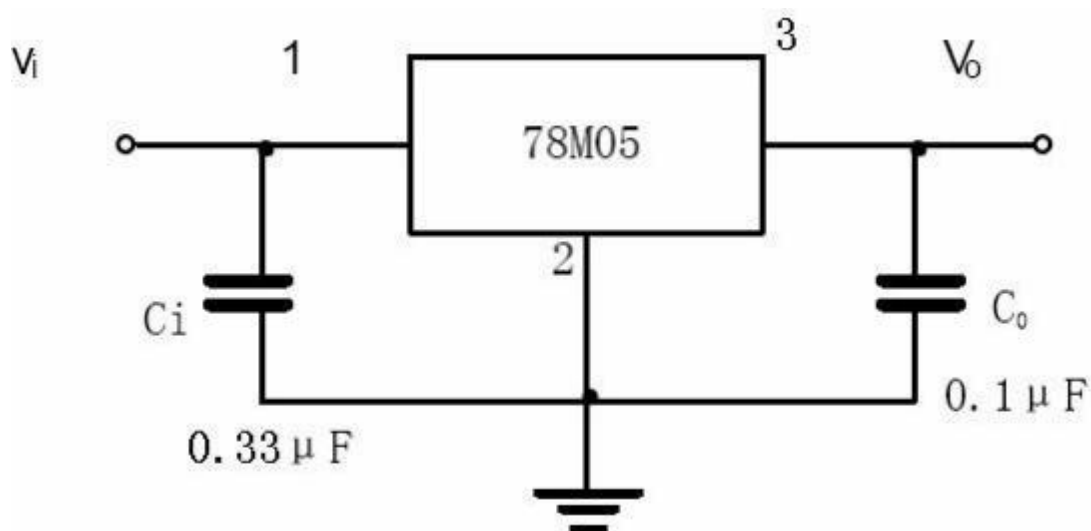
(unless otherwise noted, $V_i=10V, I_o=350\text{ mA}, 0\text{ °C} < T_j < 125\text{ °C}, C_1=0.33\text{ }\mu\text{F}, C_o=0.1\text{ }\mu\text{F}$)

Characteristics	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Output Voltage	V_o	$T_j=25\text{ °C}$	4.8	5.0	5.2	V
		$7V \leq V_i \leq 20\text{ V}, I_o=5\text{ mA} \sim 350\text{ mA}$	4.75	5	5.25	
Load Regulation	ΔV_o	$T_j=25\text{ °C}, I_o=5\text{ mA} \sim 500\text{ mA}$		25	100	mV
		$T_j=25\text{ °C}, I_o=5\text{ mA} \sim 200\text{ mA}$		10	50	
Line Regulation	ΔV_o	$7V \leq V_i \leq 25\text{ V}, I_o=200\text{ mA}, T_j=25\text{ °C}$		4	100	mV
		$8V \leq V_i \leq 25\text{ V}, I_o=200\text{ mA}, T_j=25\text{ °C}$		2	50	
Quiescent Current	I_q	$T_j=25\text{ °C}$		4	6	m A
Quiescent Current Charge	ΔI_q	$8V \leq V_i \leq 25\text{ V}, I_o=200\text{ mA}$			0.8	mA
		$5\text{ mA} \leq I_o \leq 350\text{ mA}$			0.5	

Continues:

Characteristics	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Output Noise Voltage	V_N	$10\text{Hz} \leq f \leq 100\text{kHz}$, $T_j = 25\text{ }^\circ\text{C}$		40	200	μV
Dropout Voltage	V_d	$T_j = 25\text{ }^\circ\text{C}$		1.7		V
Ripple Rejection	RR	$8\text{V} \leq V_i \leq 18\text{V}$, $f = 120\text{Hz}$, $I_o = 300\text{mA}$, $T_j = 25\text{ }^\circ\text{C}$	56	80		dB
Short Circuit Current Limit	I_{sc}	$T_j = 25\text{ }^\circ\text{C}$		950		m A

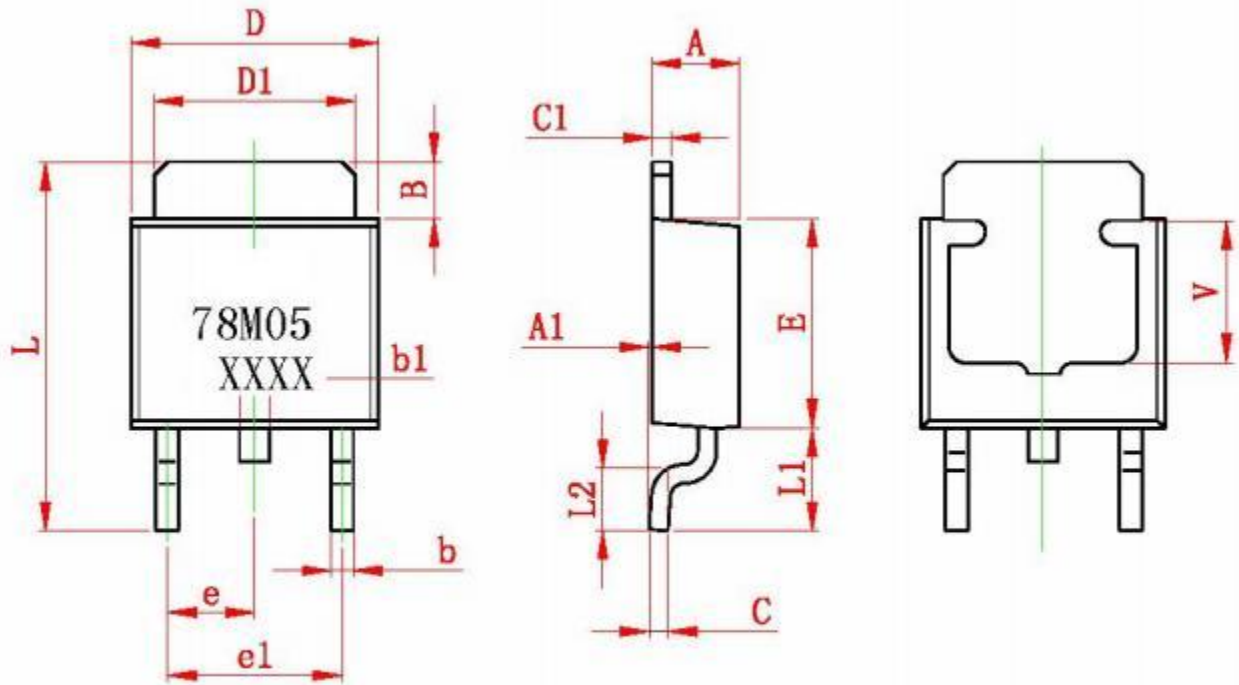
APPLICATION CIRCUIT



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

OUTLINE DRAWING

TO-252-2L



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
B	1.350	1.650	0.053	0.065
b	0.500	0.700	0.020	0.028
b1	0.700	0.900	0.028	0.035
c	0.430	0.580	0.017	0.023
c1	0.430	0.580	0.017	0.023
D	6.350	6.650	0.250	0.262
D1	5.200	5.400	0.205	0.213
E	5.400	5.700	0.213	0.224
e	2.300 TYP		0.091 TYP	
e1	4.500	4.700	0.177	0.185
L	9.500	9.900	0.374	0.390
L1	2.550	2.900	0.100	0.114
L2	1.400	1.780	0.055	0.070
V	3.80 REF		0.150 REF	