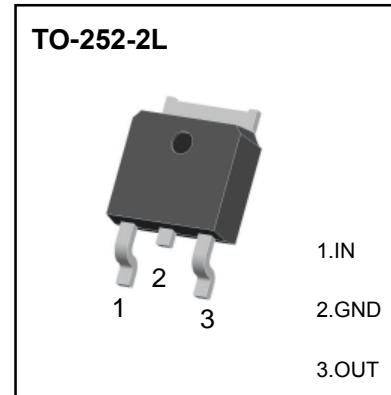


# TO-252-2L Plastic-Encapsulate Voltage Regulators

Three-terminal positive voltage regulator

## Feature

- Maximum output current  
 $I_{OM}$ : 0.5 A
- Output voltage  
 $V_O$ : 5V
- Continuous total dissipation  
 $P_D$ : 1.25 W ( $T_a = 25^\circ C$ )



## Limiting Values (Absolute Maximum Rating)

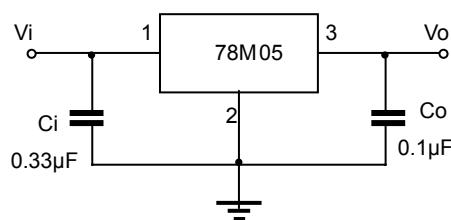
Parameter	Symbol	Value	Unit
Input Voltage	$V_i$	35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	80	°C/W
Operating Junction Temperature Range	$T_{OPR}$	-25~+125	°C
Storage Temperature Range	$T_{STG}$	-65~+150	°C

## Electrical Characteristics (T=25°C Unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	$V_o$	25°C	4.8	5	5.2	V	
		7V≤ $V_i$ ≤20V, $I_o$ =5mA-350mA	-25~125°C	4.75	5	5.25	V
Load Regulation	$\Delta V_o$	$I_o$ =5mA-0.5A	25°C		15	mV	
		$I_o$ =5mA-200mA	25°C		5	50	mV
Line Regulation	$\Delta V_o$	7V≤ $V_i$ ≤25V, $I_o$ =200mA	25°C		3	100	mV
		8V≤ $V_i$ ≤25V, $I_o$ =200mA	25°C		1	50	mV
Quiescent Current	$I_q$		25°C		4.2	6	mA
Quiescent Current Change	$\Delta I_q$	8V≤ $V_i$ ≤25V, $I_o$ =200mA	-25~125°C			0.8	mA
	$\Delta I_q$	5mA≤ $I_o$ ≤350mA	-25~125°C			0.5	mA
Output Noise Voltage	$V_N$	10Hz≤f≤100KHz	25°C		40	200	µV/ $V_o$
Ripple Rejection	$RR$	8V≤ $V_i$ ≤18V, f=120Hz, $I_o$ =300mA	-25~125°C	62	80		dB
Dropout Voltage	$V_d$	$I_o$ =350mA	25°C		2	2.5	V
Short Circuit Current	$I_{sc}$	$V_i$ =10V	25°C		300		mA
Peak Current	$I_{pk}$		25°C		0.5		A

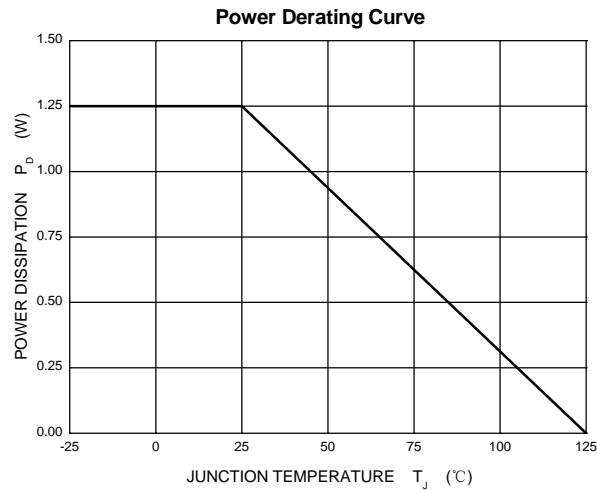
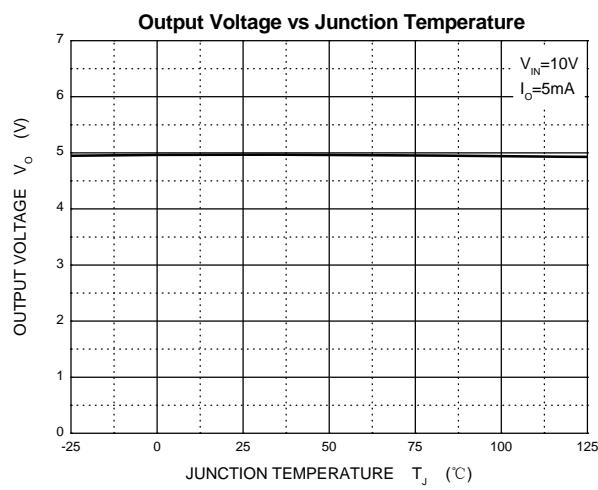
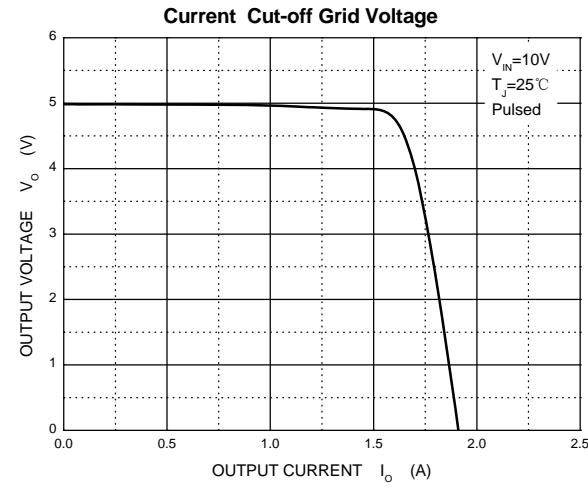
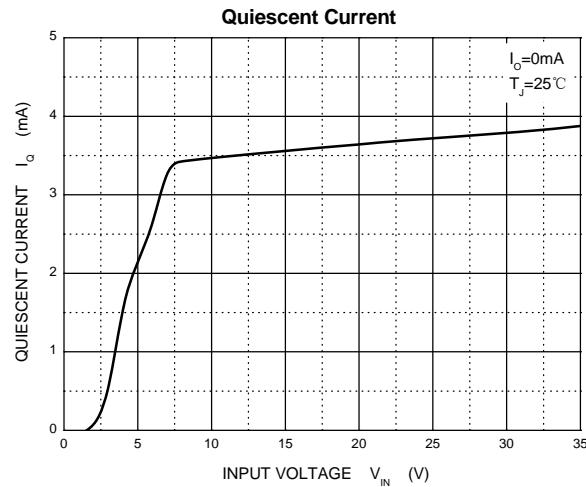
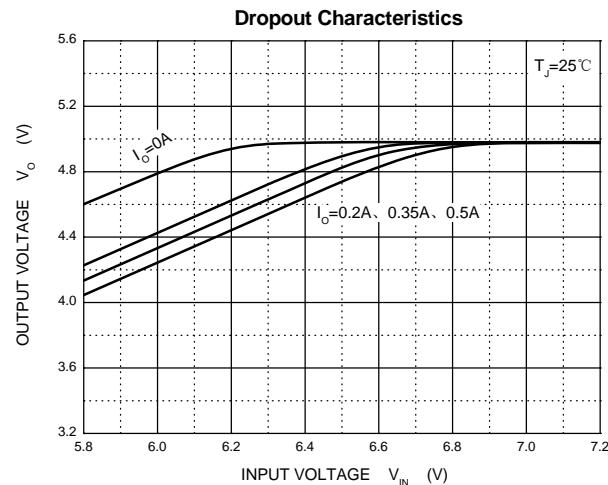
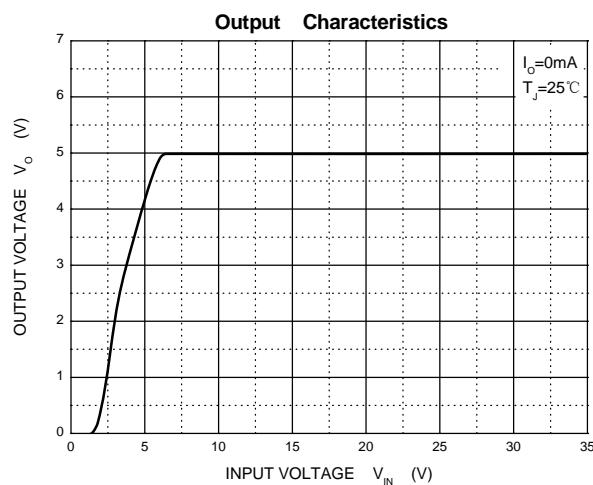
\* Pulse test.

## TYPICAL APPLICATION

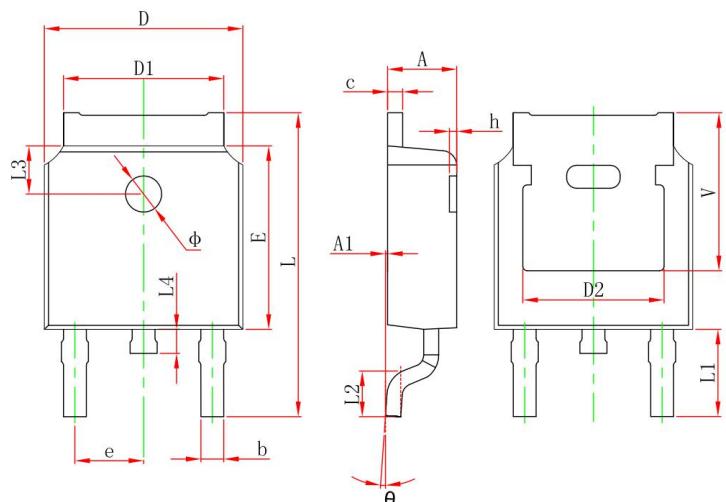


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

## Typical Characteristics



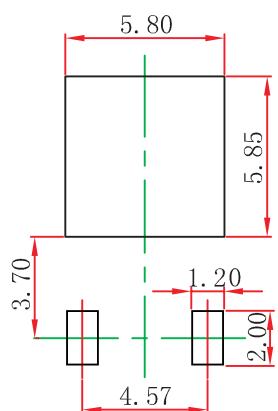
## TO-252-2L Package Outline Dimensions



SYMBOL	MIN	MAX	SYMBOL	MIN	MAX
A	2.20	2.40	L1	2.90	REF
A1	0.000	0.125	L2	1.40	1.70
b	0.66	0.86	L3	1.60	REF
c	0.46	0.58	L4	0.60	1.00
D	6.50	6.70	Φ	1.10	1.30
D1	5.10	5.46	θ	0°	8°
D2	4.830	REF	h	0.00	0.30
E	6.00	6.20	V	5.35	REF
e	2.186	2.386			
L	9.80	10.40			
Coplanar degrees	0	0.09			

Unit : mm

## TO-252-2L Suggested Pad Layout



### Note:

1. Controlling dimension:in millimeters.
- 2.General tolerance: $\pm 0.05$ mm.
- 3.The pad layout is for reference purposes only.

### NOTICE

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