

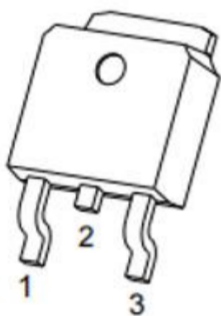
### Features

- 3-Terminal regulators
- Maximum Output current 1A
- Output voltage  $V_o$ : 5V
- Compact package: TO-252-2L

### Applications

- HVAC Systems
- SMPS Post Regulation
- Test and Measurement Equipment
- Industrial Power Supplies

### PIN CONFIGURATION



- 1.VIN
- 2.GND
- 3.OUT

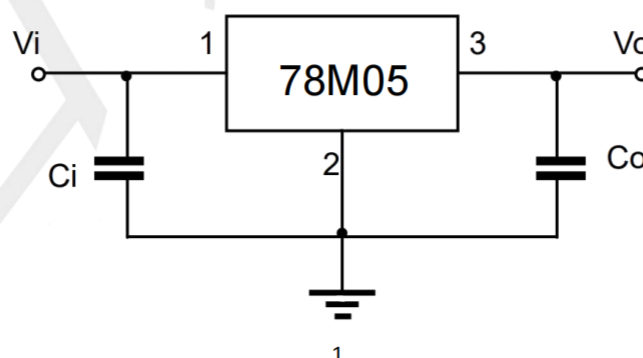
Pin Number	Pin Name	Pin Function
1	VIN	Input of Supply Voltage
2	GND	Ground
3	VOUT	Output of the Regulator

### Absolute Maximum Ratings

over operating free-air temperature range (unless otherwise noted)

Symbol	Parameter	Rating	UNIT
VIN	Input voltage	35	V
$R_{\theta JA}$	Thermal Resistance Junction-ambient to Air	80	$^{\circ}\text{C}/\text{W}$
PD	Continuous total dissipation ( $T_a = 25^{\circ}\text{C}$ )	1.25	W
T <sub>OPR</sub>	Operating Junction Temperature Range	-40~+125	$^{\circ}\text{C}$
T <sub>stg</sub>	Storage temperature range	-65~+150	$^{\circ}\text{C}$

### TYPICAL APPLICATION



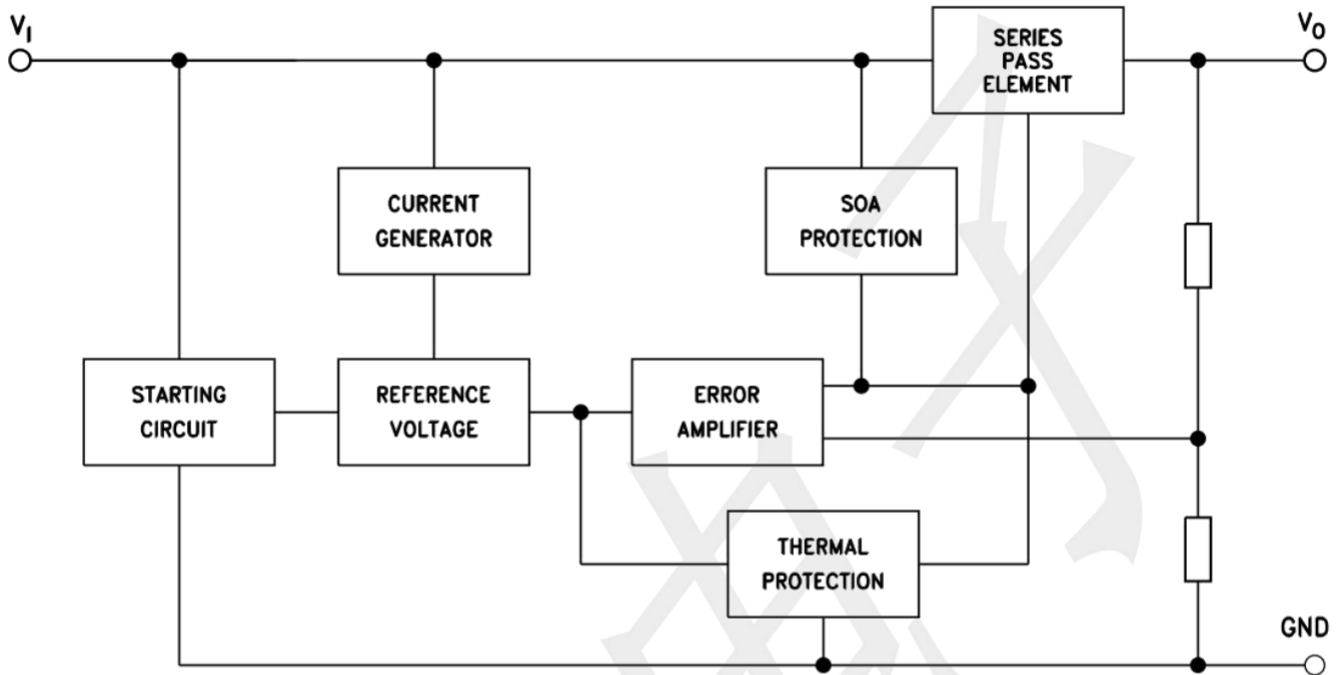
### Electrical Characteristics

( $V_i=10V, I_o=500mA, 0 < T_J < 125^\circ C, C_i=0.33\mu F, C_o=0.1\mu F$ , unless otherwise specified)

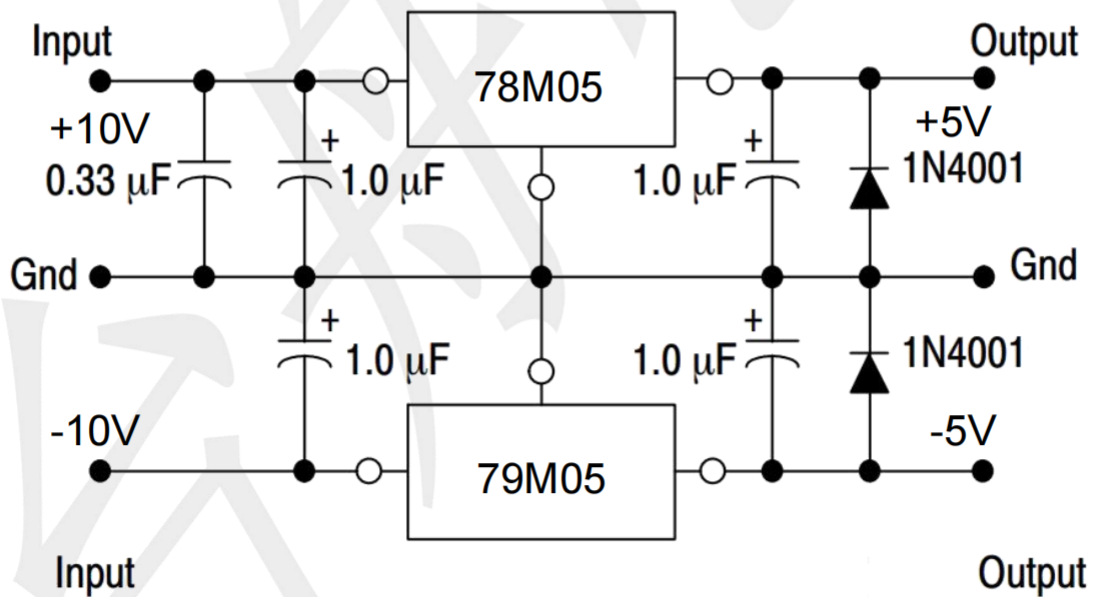
AMETER	SYMBOL	TEST Conditions	MIN	TYP	MAX	UNIT
DC Output Voltage	VO	T <sub>J</sub> =25°C	4.8	5.0	5.2	V
		P <sub>D</sub> <15W V <sub>I</sub> =8V to 20V, I <sub>o</sub> =5mA to 1A	4.75	5.0	5.25	V
Load Regulation	ΔV <sub>o</sub>	T <sub>J</sub> =25°C I <sub>o</sub> =5mA to 1A	--	--	100	mV
		T <sub>J</sub> =25°C I <sub>o</sub> =250mA to 750mA	--	--	50	mV
Line regulation	ΔV <sub>o</sub>	T <sub>J</sub> =25°C V <sub>I</sub> =7.5V to 25V	--	--	100	mV
		T <sub>J</sub> =25°C V <sub>I</sub> =8V to 12V	--	--	50	mV
Quiescent Current	I <sub>q</sub>	T <sub>J</sub> =25°C	--	--	8.0	mA
Quiescent Current Change	ΔI <sub>q</sub>	V <sub>I</sub> =8V to 25V	--	--	0.8	mA
		I <sub>o</sub> =5mA to 1A	--	--	0.5	mA
Output Voltage Drift	ΔV <sub>o</sub> /ΔT	I <sub>o</sub> =5mA	--	0.8	--	mV/°C
Output Noise Voltage	V <sub>N</sub>	T <sub>J</sub> =25°C 10Hz≤f≤100KHz	--	42	--	μV/V <sub>o</sub>
Ripple Rejection	RR	V <sub>I</sub> =8V to 18V, f=120Hz	63	72	--	dB
Dropout Voltage	V <sub>d</sub>	I <sub>o</sub> =300mA T <sub>J</sub> =25°C	--	1.0	--	V
Peak Current	I <sub>pk</sub>	T <sub>J</sub> =25°C	--	1.0	--	A

### BLOCK DIAGRAM

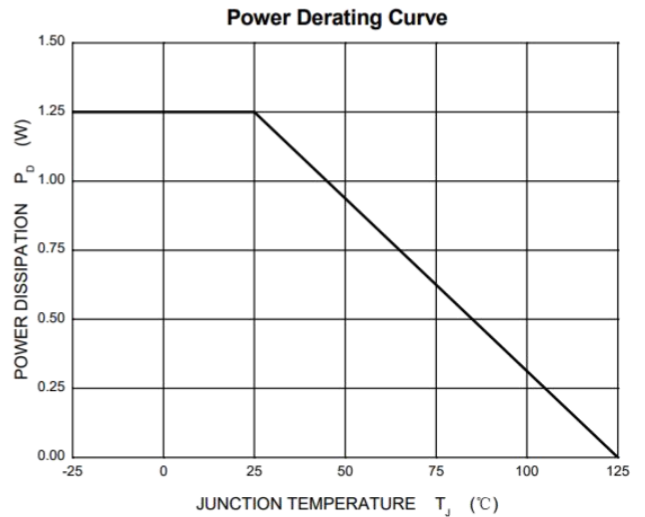
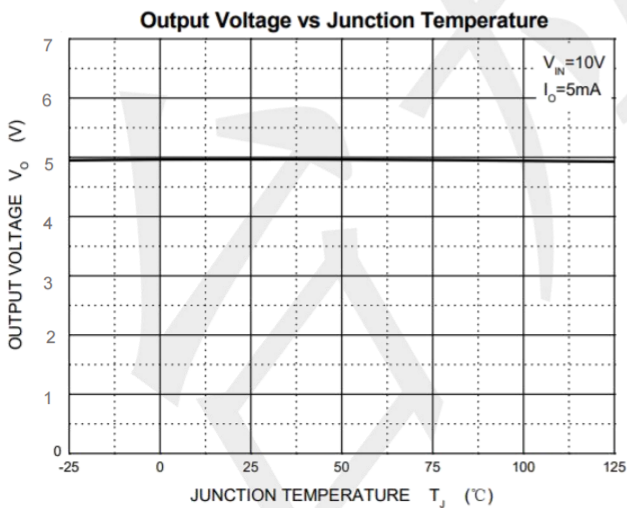
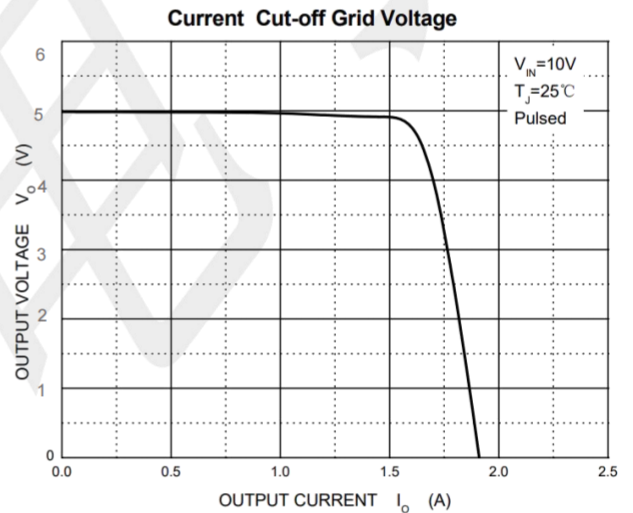
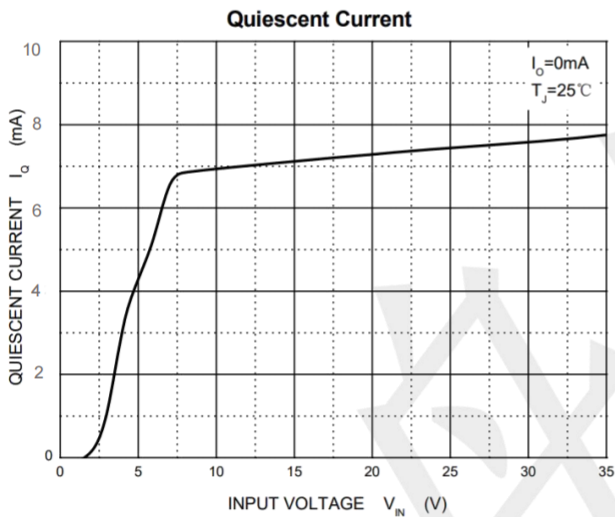
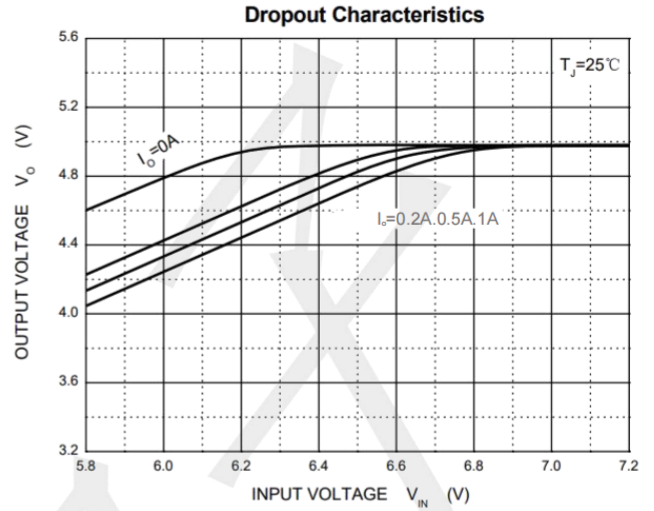
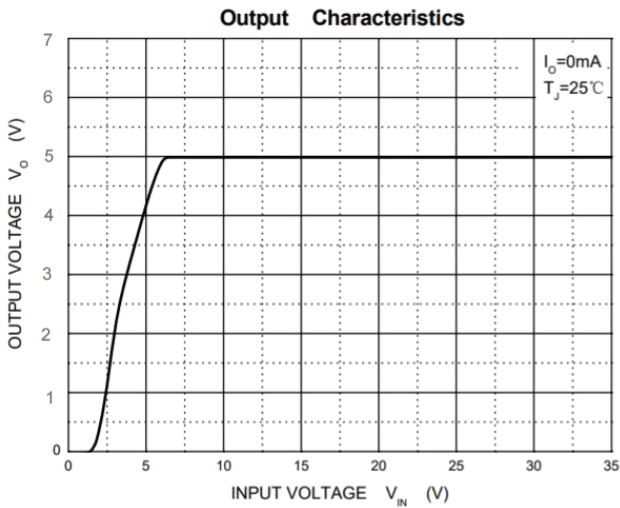
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### Typical Application Circuit



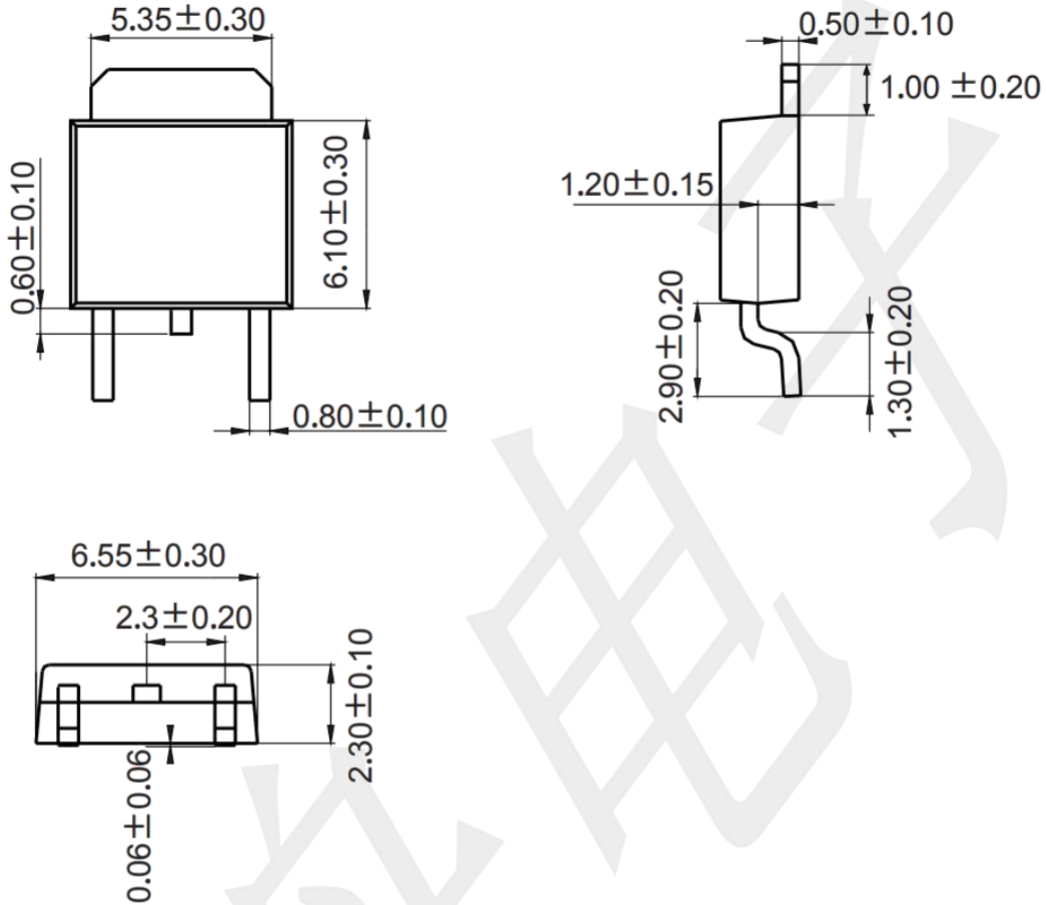
### Typical Operating Characteristics (25 °C, unless otherwise noted)



Package Outline Dimensions (unit: mm)

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TO-252-2L



Mounting Pad Layout (unit: mm)

