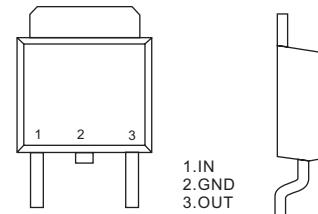


## Features

- Maximum Output current I<sub>o</sub>: 1.0A
- Output Voltage V<sub>o</sub>: 5V
- Continuous Total Dissipation P<sub>d</sub>: 1.25W



**TO-252**

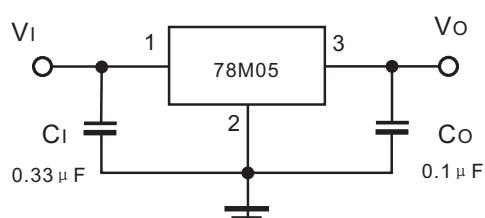
## Absolute Maximum Ratings (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Rating	Unit
Input Voltage	V <sub>I</sub>	35	V
Operating Junction Temperature Range	T <sub>OPR</sub>	-55 ~ +125	°C
Storage Temperature Range	T <sub>STG</sub>	-65 ~ +150	°C

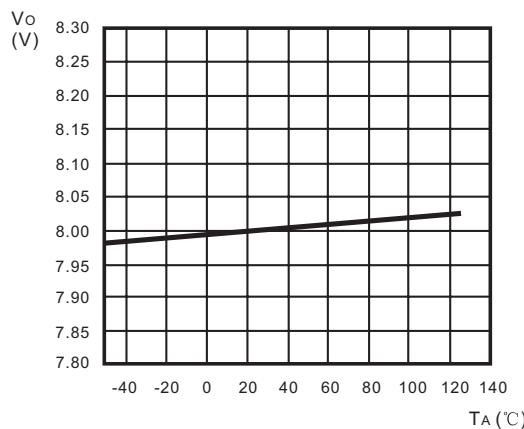
## Electrical Characteristics (V<sub>I</sub>=10V, I<sub>o</sub>=350mA, C<sub>i</sub>=0.33μF, C<sub>o</sub>=0.1μF, unless otherwise specified)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Output Voltage	V <sub>O</sub>	T <sub>J</sub> = 25°C	4.8	5.0	5.2	V
		T <sub>J</sub> = 0~125°C, 7V≤V <sub>I</sub> ≤20V, I <sub>o</sub> =5mA~350mA, P <sub>O</sub> ≤15W	4.75	5.0	5.25	V
Load Regulation	△V <sub>O</sub>	T <sub>J</sub> = 25°C, I <sub>o</sub> =5mA~0.5A		15	100	mV
		T <sub>J</sub> = 25°C, I <sub>o</sub> =5mA~200mA		5	50	mV
Line Regulation	△V <sub>O</sub>	T <sub>J</sub> = 25°C, 7V≤V <sub>I</sub> ≤25V, I <sub>o</sub> = 200mA		3	100	mV
		T <sub>J</sub> = 25°C, 8V≤V <sub>I</sub> ≤25V, I <sub>o</sub> = 200mA		1	50	mV
Quiescent Current	I <sub>Q</sub>	T <sub>J</sub> = 25°C		4.2	6	mA
Quiescent current Change	△I <sub>Q</sub>	T <sub>J</sub> = 0~125°C, 8V≤V <sub>I</sub> ≤25V, I <sub>o</sub> = 200mA			0.8	mA
		T <sub>J</sub> = 0~125°C, 5mA≤I <sub>o</sub> ≤350mA			0.5	
Output Noise Voltage	V <sub>N</sub>	T <sub>J</sub> = 25°C, 10Hz≤f≤100KHz		40	200	μV
Ripple Rejection	RR	T <sub>J</sub> =0~125°C, 8V≤V <sub>I</sub> ≤18V, f=120Hz, I <sub>o</sub> =300mA	62	80		dB
Dropout Voltage	V <sub>D</sub>	T <sub>J</sub> = 25°C, I <sub>o</sub> = 350mA		2	2.5	V
Short Circuit Current	I <sub>SC</sub>	T <sub>J</sub> = 25°C, V <sub>I</sub> = 10V		300		mA
Peak Current	I <sub>PK</sub>	T <sub>J</sub> = 25°C		0.7		A

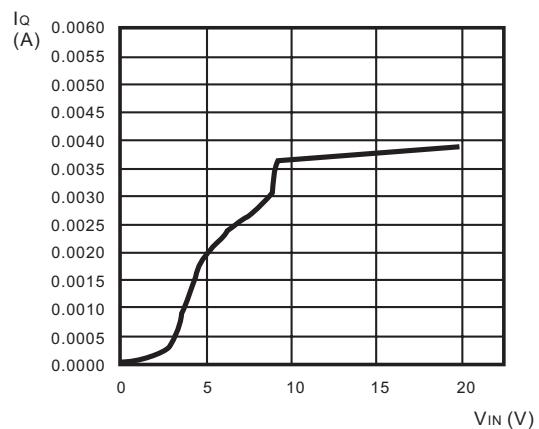
## Typical Application



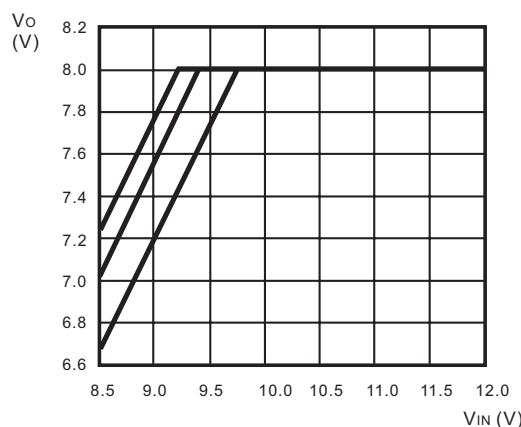
### Typical Characteristics



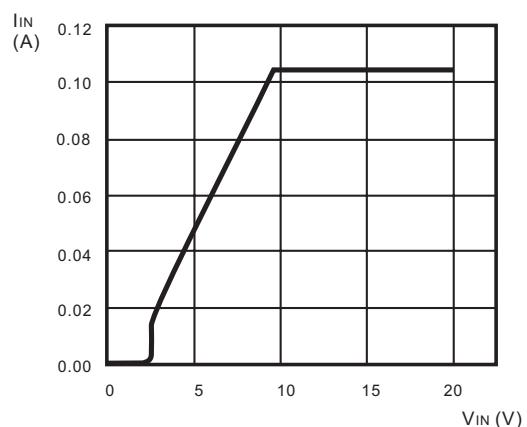
Ambient Temperature vs Output Voltage



Input Voltage vs Quiescent Current ( $T_J = 25^\circ\text{C}$ )

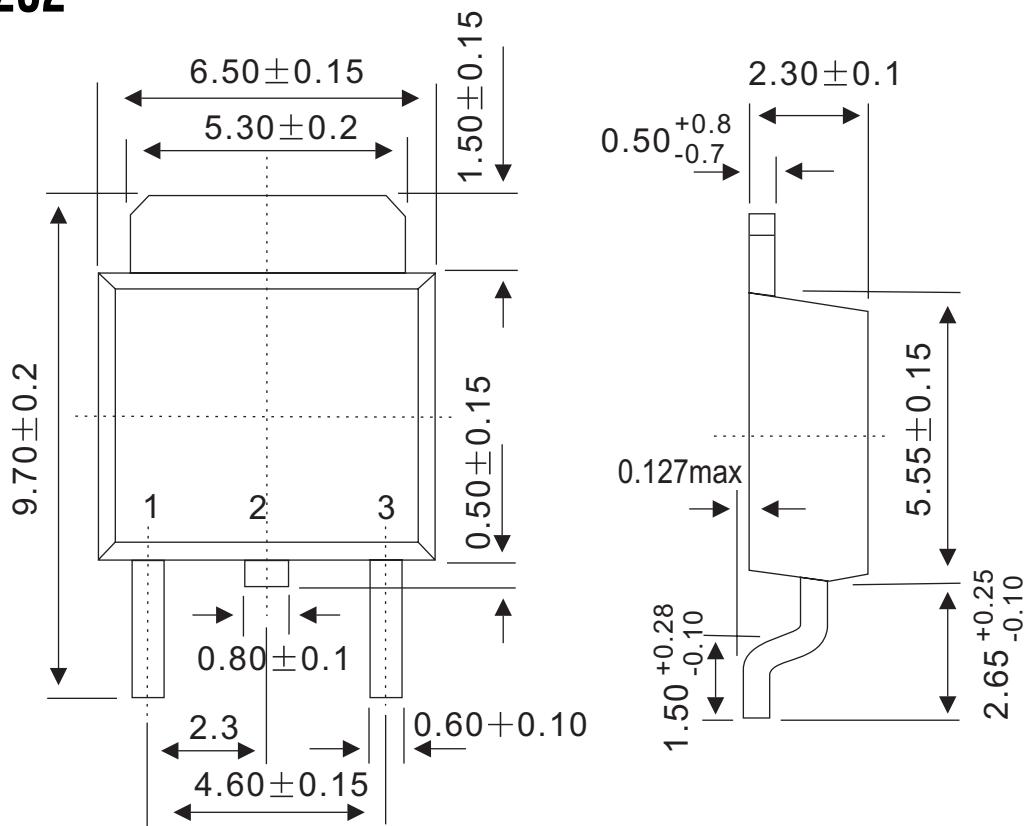


Input Voltage vs Output Voltage ( $T_J = 25^\circ\text{C}$ )



Input Voltage vs Input Current ( $T_J = 25^\circ\text{C}$ )

## TO-252



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