

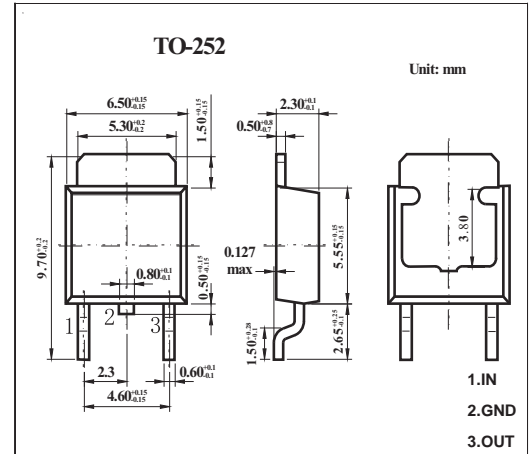
## Three-terminal positive voltage regulator

### FEATURES

- Maximum output current IOM: 0.5 A
- Output voltage VO: 6V
- Continuous total dissipation  
PD: 1.25 W ( T<sub>a</sub> = 25 °C )

### MECHANICAL DATA

- Case: TO-252 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Input Voltage	V <sub>i</sub>	35	V
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	80	°C/W
Operating Junction Temperature Range	T <sub>OPR</sub>	-25~+125	°C
Storage Temperature Range	T <sub>STG</sub>	-65~+150	°C

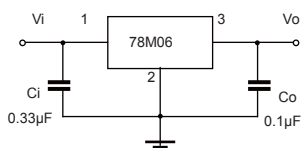
## ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

(V<sub>i</sub>=11V, I<sub>O</sub>=350mA, C<sub>i</sub>=0.33μF, C<sub>o</sub>=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V <sub>o</sub>	25°C	5.75	6	6.25	V
		8V ≤ V <sub>i</sub> ≤ 21V, I <sub>o</sub> = 5mA-350mA	-25-125°C	5.7	6	6.3
Load Regulation	ΔV <sub>o</sub>	I <sub>o</sub> = 5mA-0.5A	25°C	18	120	mV
		I <sub>o</sub> = 5mA-200mA	25°C	10	60	mV
Line Regulation	ΔV <sub>o</sub>	8V ≤ V <sub>i</sub> ≤ 25V, I <sub>o</sub> = 200mA	25°C	5	100	mV
		9V ≤ V <sub>i</sub> ≤ 25V, I <sub>o</sub> = 200mA	25°C	1.5	50	mV
Quiescent Current	I <sub>q</sub>	25°C		4.3	6	mA
Quiescent Current Change	ΔI <sub>q</sub>	9V ≤ V <sub>i</sub> ≤ 25V, I <sub>o</sub> = 200mA	-25-125°C		0.8	mA
		5mA ≤ I <sub>o</sub> ≤ 350mA	-25-125°C		0.5	mA
Output Noise Voltage	V <sub>N</sub>	10Hz ≤ f ≤ 100KHz	25°C	45		μV/V <sub>o</sub>
Ripple Rejection	RR	9V ≤ V <sub>i</sub> ≤ 19V, f = 120Hz, I <sub>o</sub> = 300mA	-25-125°C	59	80	dB
Dropout Voltage	V <sub>d</sub>	I <sub>o</sub> = 350mA	25°C	2		V
Short Circuit Current	I <sub>sc</sub>	V <sub>i</sub> = 11V	25°C	270		mA
Peak Current	I <sub>pk</sub>		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

