

Three-terminal positive voltage regulator

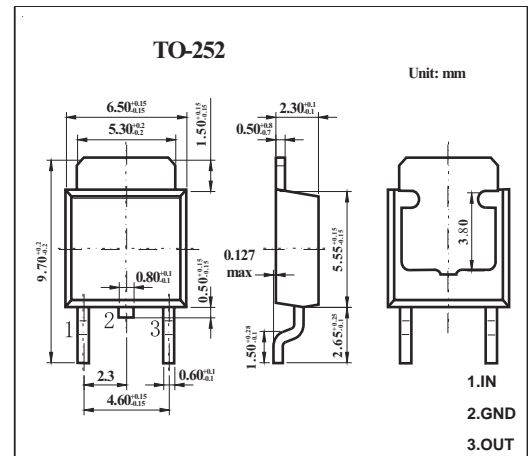
FEATURES

- Maximum output current IOM: 0.5 A
- Output voltage VO: 9 V
- Continuous total dissipation

$$PD: 1.25 W (T_a = 25^\circ C)$$

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)

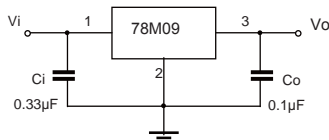
Parameter	Symbol	Value	Unit
Input Voltage	V _i	35	V
Thermal Resistance from Junction to Ambient	R _{θJA}	80	°C/W
Operating Junction Temperature Range	T _{OPR}	-25~+125	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE
(Vi=16V, Io=350mA, Ci=0.33μF, Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	Vo	25°C	8.65	9	9.35	V
		11.5V ≤ Vi ≤ 24V, Io=5mA-350mA	-25-125°C	8.55	9	9.45
Load Regulation	ΔVo	Io=5mA-500mA	25°C	20	180	mV
		Io=5mA-200mA	25°C	10	90	mV
Line Regulation	ΔVo	11.5V ≤ Vi ≤ 26V, Io=200mA	25°C	6	100	mV
		12V ≤ Vi ≤ 26V, Io=200mA	25°C	2	50	mV
Quiescent Current	Iq	25°C		4.6	6	mA
Quiescent Current Change	ΔIq	11.5V ≤ Vi ≤ 26V, Io=200mA	-25-125°C		0.8	mA
	ΔIq	5mA ≤ Io ≤ 350mA	-25-125°C		0.5	mA
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	25°C	60		μV/Vo
Ripple Rejection	RR	13 ≤ Vi ≤ 23V, f=120Hz, Io=300mA	-25-125°C	56	80	dB
Dropout Voltage	V _d	Io=350mA	25°C	2		V
Short Circuit Current	I _{sc}	Vi=16V	25°C		250	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.

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics

