

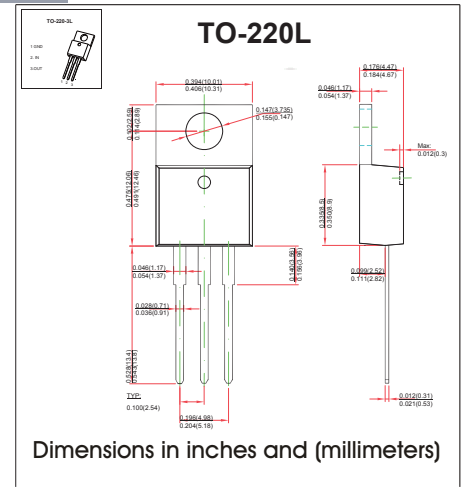
## Three-terminal positive voltage regulator

### FEATURES

- Maximum output current I<sub>OM</sub>: 0.5A
- Output voltage V<sub>O</sub>: 9 V
- Continuous total dissipation  
PD: 1.5W ( T<sub>a</sub> = 25 °C )

### MECHANICAL DATA

- Case: TO-220 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

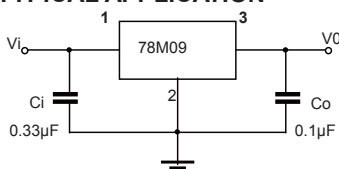
Parameter	Symbol	Value	Unit
Input Voltage	V <sub>i</sub>	35	V
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	66.7	°C/W
Operating Junction Temperature Range	T <sub>OPR</sub>	-25~+125	°C
Storage Temperature Range	T <sub>STG</sub>	-65~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE  
(V<sub>i</sub>=16V, 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	8.65	9	9.35	V
		11.5V ≤ V <sub>i</sub> ≤ 24V, I <sub>o</sub> =5mA-350mA	-25-125°C	8.55	9	9.45
Load Regulation	ΔV <sub>o</sub>	I <sub>o</sub> =5mA-500mA	25°C	20	180	mV
		I <sub>o</sub> =5mA-200mA	25°C	10	90	mV
Line Regulation	ΔV <sub>o</sub>	11.5V ≤ V <sub>i</sub> ≤ 26V, I <sub>o</sub> =200mA	25°C	6	100	mV
		12V ≤ V <sub>i</sub> ≤ 26V, I <sub>o</sub> =200mA	25°C	2	50	mV
Quiescent Current	I <sub>q</sub>	25°C		4.6	6	mA
Quiescent Current Change	ΔI <sub>q</sub>	11.5V ≤ V <sub>i</sub> ≤ 26V, I <sub>o</sub> =200mA	-25-125°C		0.8	mA
	ΔI <sub>q</sub>	5mA ≤ I <sub>o</sub> ≤ 350mA	-25-125°C		0.5	mA
Output Noise Voltage	V <sub>N</sub>	10Hz ≤ f ≤ 100KHz	25°C	60		μV/V <sub>o</sub>
Ripple Rejection	RR	13 ≤ V <sub>i</sub> ≤ 23V, f=120Hz, I <sub>o</sub> =300mA	-25-125°C	56	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> =16V	25°C	250		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 APPLICATION

