

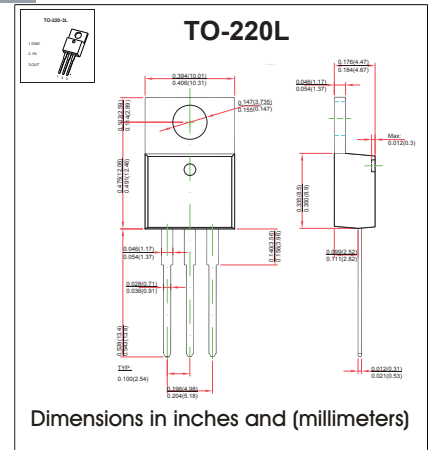
Three-terminal positive voltage regulator

FEATURES

- Maximum output current I_{OM}: 0.5A
- Output voltage V_O: 9 V
- Continuous total dissipation
PD: 1.5W (T_a = 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)

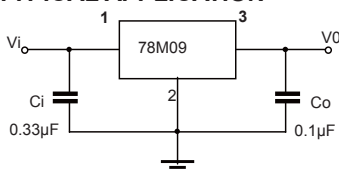
Parameter	Symbol	Value	Unit
Input Voltage	V _i	35	V
Thermal Resistance from Junction to Ambient	R _{θJA}	66.7	°C/W
Operating Junction Temperature Range	T _{OPR}	-25~+125	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE
(V_i=16V, I_o=350mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

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

TYPICAL APPLICATION

