

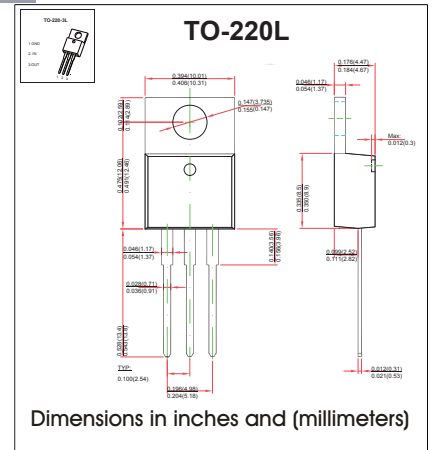
Three-terminal positive voltage regulator

FEATURES

- Maximum output current IOM: 0.5A
- Output voltage VO: 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)

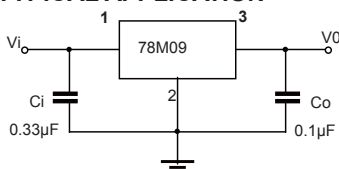
Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	66.7	°C/W
Operating Junction Temperature Range	T_{OPR}	-25~+125	°C
Storage Temperature Range	T_{STG}	-65~+150	°C

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	25°C	8.65	9	9.35	V
		$11.5 \leq V_i \leq 24V$, $I_o=5mA-350mA$	-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	$11.5V \leq V_i \leq 26V$, $I_o=200mA$	25°C	6	100	mV
		$12V \leq V_i \leq 26V$, $I_o=200mA$	25°C	2	50	mV
Quiescent Current	I_q	25°C		4.6	6	mA
Quiescent Current Change	ΔI_q	$11.5V \leq V_i \leq 26V$, $I_o=200mA$	-25-125°C		0.8	mA
	ΔI_q	$5mA \leq I_o \leq 350mA$	-25-125°C		0.5	mA
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz	25°C	60		μV/Vo
Ripple Rejection	RR	$13 \leq V_i \leq 23V$, 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.

RATINGS AND CHARACTERISTIC CURVES

TYPICAL APPLICATION

