

TO-252 Three-terminal positive voltage regulator

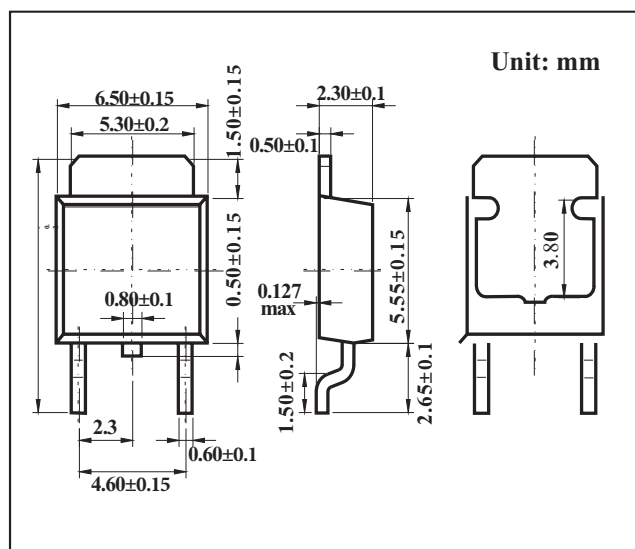
FEATURES

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

P_D : 1.25 W ($T_a = 25^\circ\text{C}$)

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	$R_{\theta JA}$	80	$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_{OPR}	-25~+125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^\circ\text{C}$

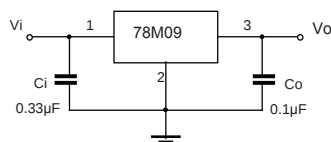
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

($V_i=16\text{V}$, $I_o=350\text{mA}$, $C_i=0.33\mu\text{F}$, $C_o=0.1\mu\text{F}$, unless otherwise specified)

Pa rameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	Vo		25°C	8.65	9	9.35	V
		11.5≤V _i ≤24V, I _o =5mA-350mA	-25-125°C	8.55	9	9.45	V
Load Regulation	ΔVo	I _o =5mA-500mA	25°C		20	180	mV
		I _o =5mA-200mA	25°C		10	90	mV
Line Regulation	ΔVo	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	Iq		25°C		4.6	6	mA
Quiescent Current Change	ΔIq	11.5V≤V _i ≤26V, I _o =200mA	-25-125°C			0.8	mA
	ΔIq	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	Vd	I _o =350mA	25°C		2		V
Short Circuit Current	Isc	Vi=16V	25°C		250		mA
Peak Current	Ipk		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

