

TO-252 Three-terminal positive voltage regulator

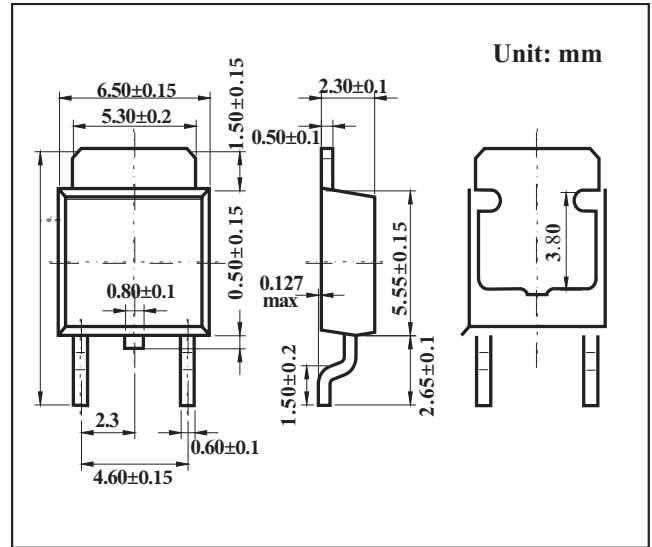
FEATURES

- Maximum output current IOM: 0.5 A
- Output voltage VO: 5V
- Continuous total dissipation

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

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	°C/W
Operating Junction Temperature Range	T_{OPR}	-25~+125	°C
Storage Temperature Range	T_{STG}	-65~+150	°C

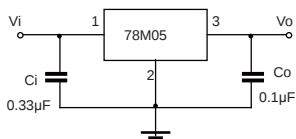
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

($V_i=10V, I_o=350mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	Vo		25°C	4.8	5	5.2	V
		7V≤Vi≤20V, Io=5mA-350mA	-25~125°C	4.75	5	5.25	V
Load Regulation	ΔVo	Io=5mA-0.5A	25°C		15	100	mV
		Io=5mA-200mA	25°C		5	50	mV
Line Regulation	ΔVo	7V≤Vi≤25V, Io=200mA	25°C		3	100	mV
		8V≤Vi≤25V, Io=200mA	25°C		1	50	mV
Quiescent Current	Iq		25°C		4.2	6	mA
Quiescent Current Change	ΔIq	8V≤Vi≤25V, Io=200mA	-25~125°C			0.8	mA
	ΔIq	5mA≤Io≤350mA	-25~125°C			0.5	mA
Output Noise Voltage	VN	10Hz≤ f ≤100KHz	25°C		40	200	μV/Vo
Ripple Rejection	RR	8V≤Vi≤18V,f=120Hz,Io=300mA	-25~125°C	62	80		dB
Dropout Voltage	Vd	Io=350mA	25°C		2	2.5	V
Short Circuit Current	Isc	Vi=10V	25°C		300		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

