

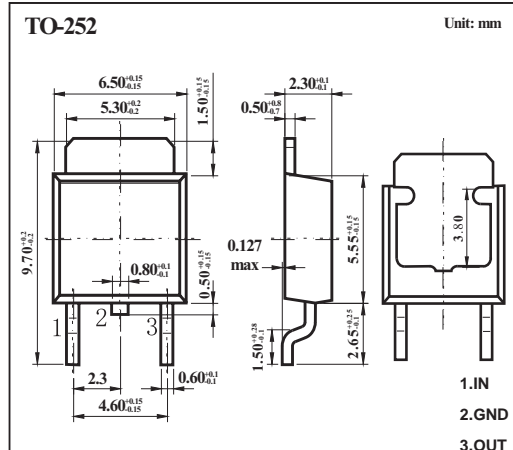
Three-terminal positive voltage regulator

FEATURES

- Maximum output current IOM: 0.5 A
- Output voltage VO: 5V
- Continuous total dissipation
PD: 1.25 W (T_a = 25 °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)

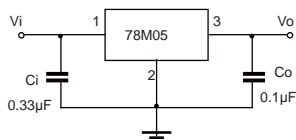
Parameter	Symbol	Value	Unit
Input Voltage	V _i	35	V
Thermal Resistance from Junction to Ambient	R _{θJA}	80	°C/W
Operating Junction Temperature Range	T _{OPR}	-25~+125	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE
(V_i=10V, I_o=350mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V _o	25°C	4.8	5	5.2	V
		7V ≤ V _i ≤ 20V, I _o = 5mA - 350mA	-25~125°C	4.75	5	5.25
Load Regulation	ΔV _o	I _o = 5mA - 0.5A	25°C	15	100	mV
		I _o = 5mA - 200mA	25°C	5	50	mV
Line Regulation	ΔV _o	7V ≤ V _i ≤ 25V, I _o = 200mA	25°C	3	100	mV
		8V ≤ V _i ≤ 25V, I _o = 200mA	25°C	1	50	mV
Quiescent Current	I _q	25°C		4.2	6	mA
Quiescent Current Change	ΔI _q	8V ≤ V _i ≤ 25V, I _o = 200mA	-25~125°C		0.8	mA
		5mA ≤ I _o ≤ 350mA	-25~125°C		0.5	mA
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	25°C	40	200	μV/V _o
Ripple Rejection	RR	8V ≤ V _i ≤ 18V, f = 120Hz, I _o = 300mA	-25~125°C	62	80	dB
Dropout Voltage	V _d	I _o = 350mA	25°C	2	2.5	V
Short Circuit Current	I _{sc}	V _i = 10V	25°C	300		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 Characteristics

