

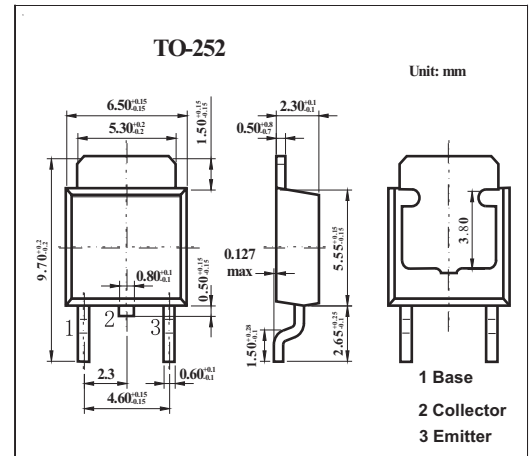
Three-terminal positive voltage regulator

FEATURES

- Maximum output current IOM: 0.5 A
- Output voltage VO: 6V
- 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

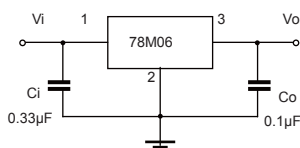
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

(Vi=11V, IO=350mA, Ci=0.33μF, Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	Vo	25°C	5.75	6	6.25	V
		8V ≤ Vi ≤ 21V, Io = 5mA-350mA	-25-125°C	5.7	6	6.3
Load Regulation	ΔVo	Io = 5mA-0.5A	25°C	18	120	mV
		Io = 5mA-200mA	25°C	10	60	mV
Line Regulation	ΔVo	8V ≤ Vi ≤ 25V, Io = 200mA	25°C	5	100	mV
		9V ≤ Vi ≤ 25V, Io = 200mA	25°C	1.5	50	mV
Quiescent Current	Iq	25°C		4.3	6	mA
Quiescent Current Change	ΔIq	9V ≤ Vi ≤ 25V, Io = 200mA	-25-125°C		0.8	mA
		5mA ≤ Io ≤ 350mA	-25-125°C		0.5	mA
Output Noise Voltage	V _N	10Hz ≤ f ≤ 100KHz	25°C	45		μV/Vo
Ripple Rejection	RR	9V ≤ Vi ≤ 19V, f = 120Hz, Io = 300mA	-25-125°C	59	80	dB
Dropout Voltage	V _d	Io = 350mA	25°C	2		V
Short Circuit Current	I _{sc}	Vi = 11V	25°C	270		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

