

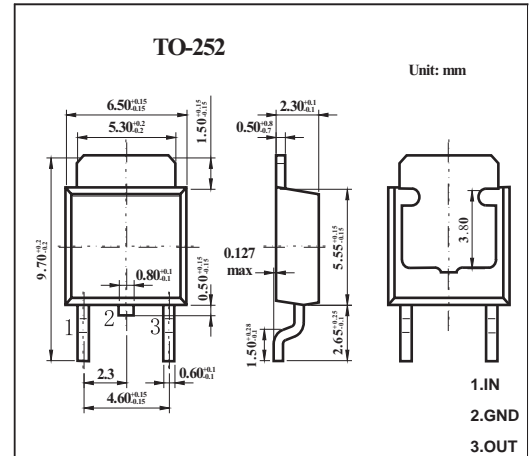
Three-terminal positive voltage regulator

FEATURES

- Maximum output current IOM: 1.5 A
- Output voltage VO: 6V
- Continuous total dissipation PD: 1.25 W

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

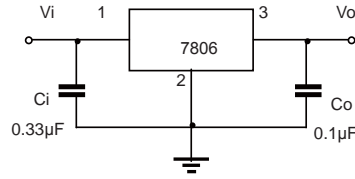
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE
($V_i=10V, I_o=500mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	25°C	5.75	6	6.25	V
		8V≤ V_i ≤21V, $I_o=5mA-1A$	-25-125°C	5.7	6	6.3
Load Regulation	ΔV_o	$I_o=5mA-1.5A$	25°C	14	120	mV
		$I_o=250mA-750mA$	25°C	4	60	mV
Line Regulation	ΔV_o	8V≤ V_i ≤25V	25°C	5	120	mV
		9V≤ V_i ≤13V	25°C	1.5	60	mV
Quiescent Current	I_q	25°C		4.3	8	mA
Quiescent Current Change	ΔI_q	8V≤ V_i ≤25V	-25-125°C		1.3	mA
		5mA≤ I_o ≤1A	-25-125°C		0.5	mA
Output voltage drift	$\Delta V_o/\Delta T$	$I_o=5mA$	-25-125°C	-0.8		mV/°C
Output Noise Voltage	V_N	10Hz≤ f ≤100KHz	25°C	45		μV/ V_o
Ripple Rejection	RR	9V≤ V_i ≤19V, $f=120Hz$	-25-125°C	59	75	dB
Dropout Voltage	V_d	$I_o=1A$	25°C	2		V
Output resistance	R_o	$f=1KHz$	25°C	10		mΩ
Short Circuit Current	I_{sc}		25°C	550		mA
Peak Current	I_{pk}		25°C	2.2		A

* Pulse test.

RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

