

TO-252 Three-terminal positive voltage regulator

FEATURES

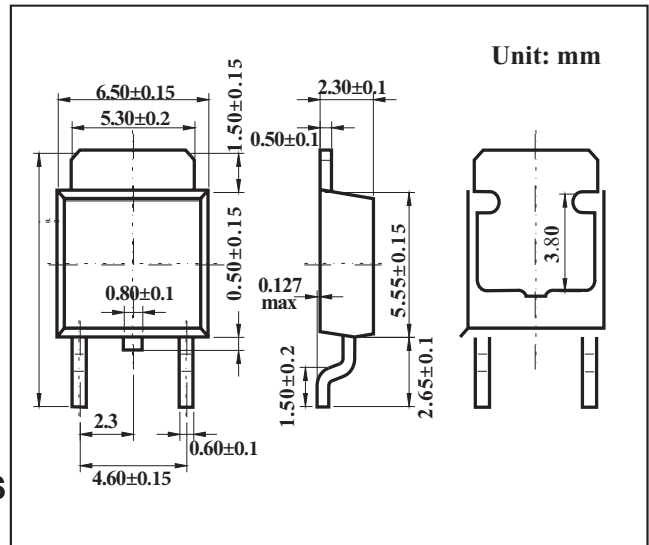
- Maximum output current IOM: 1.5 A
- Output voltage VO: 6V
- Continuous total dissipation PD: 1.25 W

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)

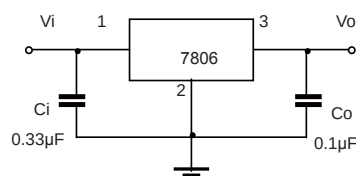


Parameter	Symbol	Value	Unit
Input Voltage	V_i	35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	80	°C/W
Operating Junction Temperature Range	T_{OPR}	-25~+125	°C
Storage Temperature Range	T_{STG}	-65~+150	°C

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	Vo		25°C	5.75	6	6.25	V
		8V≤Vi≤21V, Io=5mA-1A	-25-125°C	5.7	6	6.3	V
Load Regulation	△Vo	Io=5mA-1.5A	25°C		14	120	mV
		Io=250mA-750mA	25°C		4	60	mV
Line Regulation	△Vo	8V≤Vi≤25V	25°C		5	120	mV
		9V≤Vi≤13V	25°C		1.5	60	mV
Quiescent Current	Iq		25°C		4.3	8	mA
Quiescent Current Change	△Iq	8V≤Vi≤25V	-25-125°C			1.3	mA
		5mA≤Io≤1A	-25-125°C			0.5	mA
Output voltage drift	△Vo/△T	Io=5mA	-25-125°C		-0.8		mV/°C
Output Noise Voltage	VN	10Hz≤f≤100KHz	25°C		45		μV/Vo
Ripple Rejection	RR	9V≤Vi≤19V,f=120Hz	-25-125°C	59	75		dB
Dropout Voltage	Vd	Io=1A	25°C		2		V
Output resistance	RO	f=1KHz	25°C		10		mΩ
Short Circuit Current	Isc		25°C		550		mA
Peak Current	Ipk		25°C		2.2		A

* Pulse test.



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

