



AOS
SEMICONDUCTOR

产品规格说明书

Product Data Sheet

L7806-1.5A

TO-220-3L Plastic-Encapsulate Voltage Regulators

WEB | www.aossemi.cn 



电源管理IC



通信接口芯片



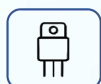
二三极管



LDO稳压器



逻辑器件



MOSFETs



运算放大器



显示驱动



MCU单片机



光电器件



L7806

 Three-terminal positive voltage regulator

TO-220-3L

■ Features

Maximum Output current I_{OM} :1.5AOutput voltage V_O :5V

Continuous total dissipation

 P_D :1.5W($T_A=25^\circ\text{C}$)15W($T_C=25^\circ\text{C}$)

1.IN

2.GND

3.OUT



■ ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

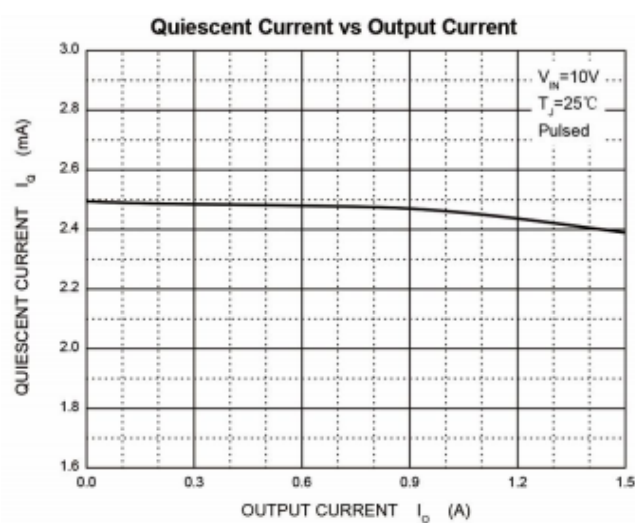
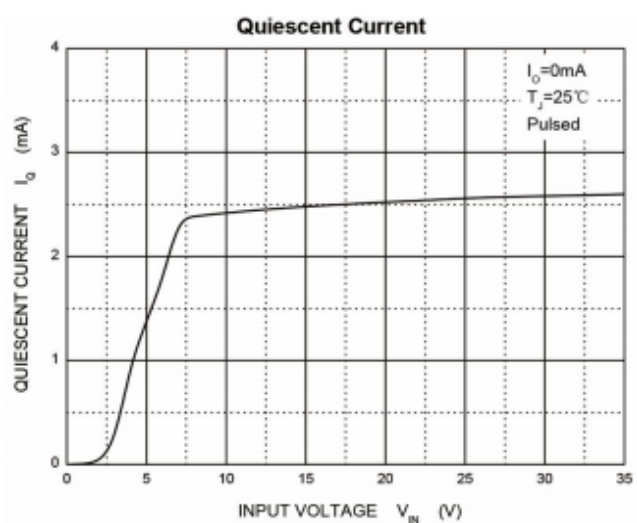
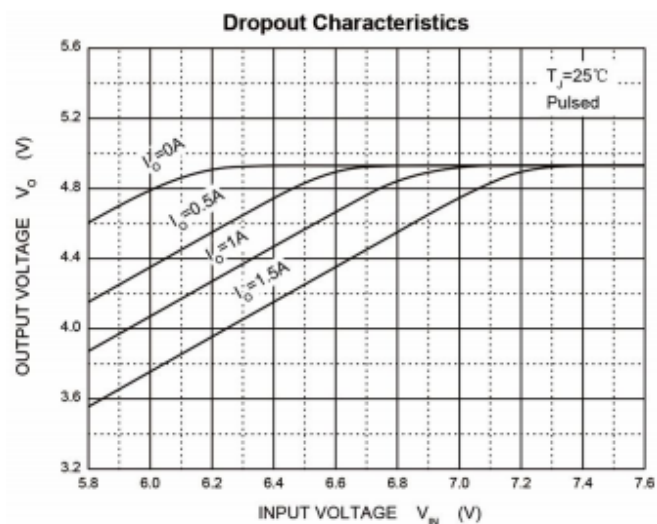
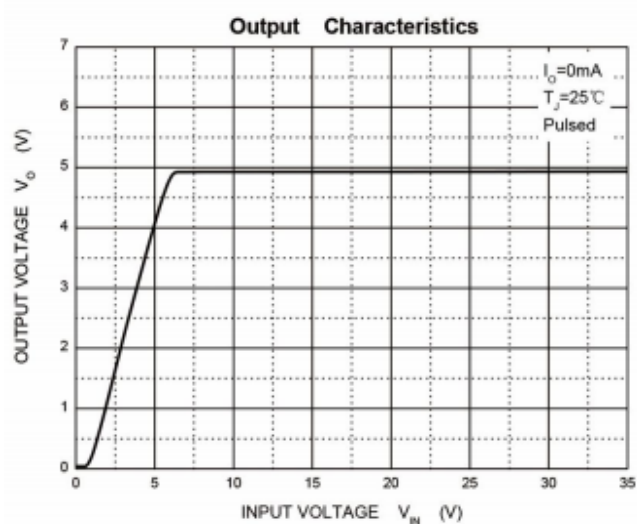
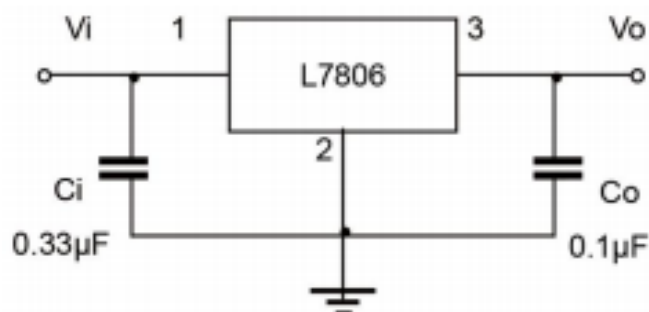
Characteristics	Symbol	Value	Unit
Input Voltage	V_i	35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	83.3	$^\circ\text{C/W}$
Thermal Resistance from Junction to Case	$T_{\theta JC}$	8.3	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_{OPR}	0~+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	$^\circ\text{C}$

■ ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=10\text{V}$, $I_O=500\text{mA}$, $C_i=0.33\mu\text{F}$, $C_O=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Output voltage	V_O	25°C	-4.8	-5	-5.2	V
		$-7\text{V} \leq V_i \leq -20\text{V}$, $I_O=5\text{mA}$ - 1A , $P \leq 15\text{W}$	0~125 $^\circ\text{C}$	-4.75	-5	-5.25
Load Regulation	ΔV_O	$I_O=5\text{mA}$ -1.2A	25 $^\circ\text{C}$	15	100	mV
		$I_O=250\text{mA}$ -750mA	25 $^\circ\text{C}$	5	50	
Line regulation	ΔV_O	$-7\text{V} \leq V_i \leq -25\text{V}$	25 $^\circ\text{C}$	12.5	50	mV
		$-8\text{V} \leq V_i \leq -12\text{V}$	25 $^\circ\text{C}$	4	15	
Quiescent Current	I_q	25 $^\circ\text{C}$		1.5	2	mA
Quiescent Current Change	ΔI_q	$-7\text{V} \leq V_i \leq -25\text{V}$	0~125 $^\circ\text{C}$		0.5	mA
		$5\text{mA} \leq I_O \leq 1\text{A}$	0~125 $^\circ\text{C}$		0.5	
Output Noise Voltage	V_N	$10\text{Hz} \leq f \leq 100\text{KHz}$	25 $^\circ\text{C}$	125		μV
Output voltage drift	$\Delta V_O / \Delta T$	$I_O=5\text{mA}$	0~125 $^\circ\text{C}$	-0.4		$\text{mV}/^\circ\text{C}$
Ripple Rejection	RR	$-8\text{V} \leq V_i \leq -18\text{V}$, $f=120\text{Hz}$	0~125 $^\circ\text{C}$	54	60	dB
Dropout Voltage	V_d	$I_O=1\text{A}$	25 $^\circ\text{C}$	1.1		V
Peak Current	I_{pk}	25 $^\circ\text{C}$		2.0		A



TYPICAL APPLICATION





■ Block Diagram

