



AOS
SEMICONDUCTOR

产品规格说明书

Product Data Sheet

L7815-1.5A

TO-220-3L Plastic-Encapsulate Voltage Regulators

WEB | www.aossemi.cn 



电源管理IC



通信接口芯片



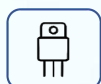
二三极管



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



L7815

 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	$^\circ\text{C}$

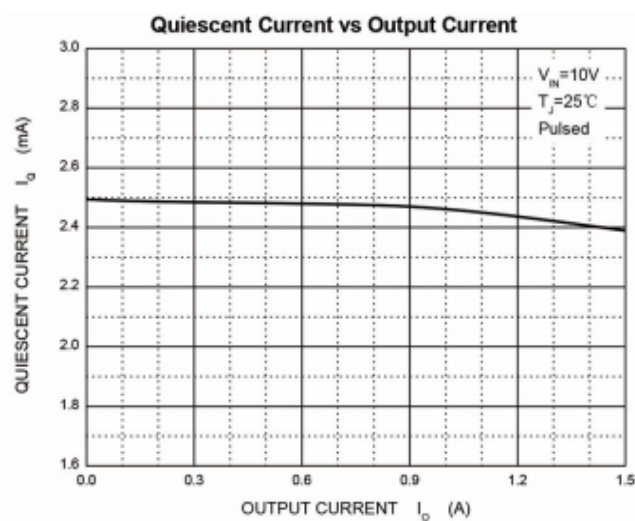
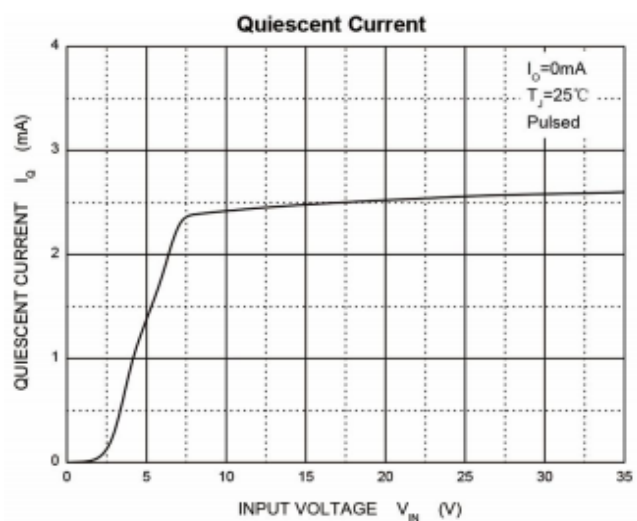
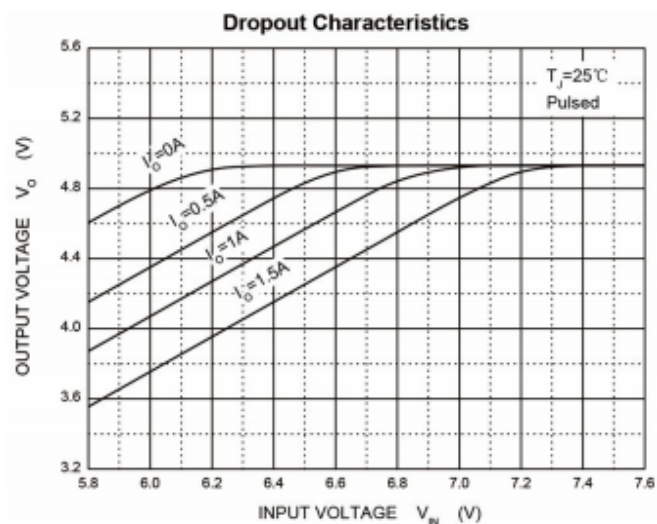
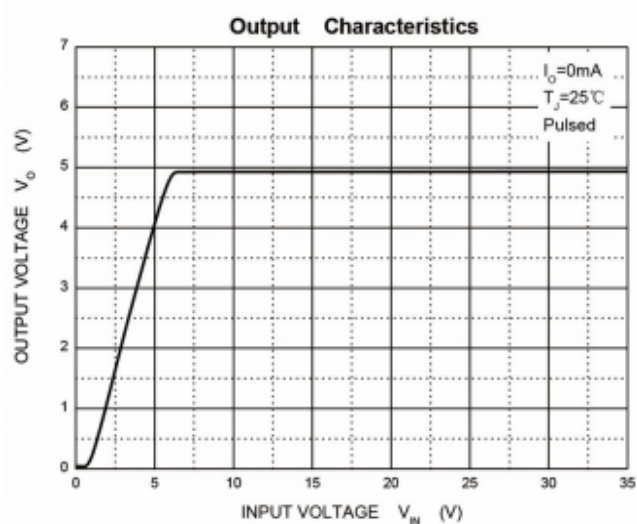
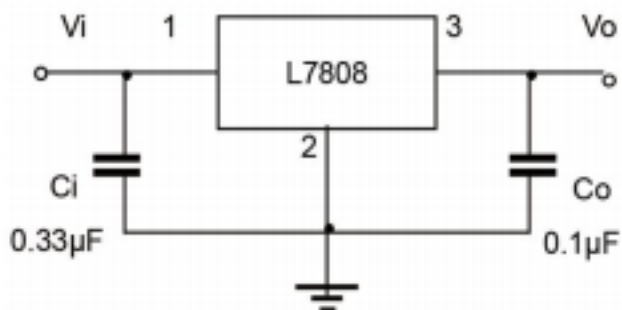
■ ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

 $(V_i=10\text{V}, I_o=500\text{mA}, C_i=0.33\mu\text{F}, C_O=0.1\mu\text{F}, \text{unless otherwise specified})$

Parameter	Symbol	Test conditions		Min.	Typ.	Max.	Unit
Output voltage	VO		25	-4.8	-5	-5.2	V
		-7V ≤ Vi ≤ -20V, Io=5mA-1A, P ≤ 15W	0~125	-4.75	-5	-5.25	
Load Regulation	Δ VO	Io5mA-1.2A	25		15	100	mV
		Io=250mA-750mA	25		5	50	
Line regulation	Δ VO	-7V ≤ Vi ≤ -25V	25		12.5	50	mV
		-8V ≤ Vi ≤ -12V	25		4	15	
Quiescent Current	Iq		25		1.5	2	mA
Quiescent Current Change	Δ Iq	-7V ≤ Vi ≤ -25V	0~125			0.5	mA
		5mA ≤ Io ≤ 1A	0~125			0.5	
Output Noise Voltage	VN	10Hz ≤ f ≤ 100KHz	25		125		uV
Output voltage drift	Δ VO/ Δ T	Io5mA	0~125		-0.4		mV/
Ripple Rejection	RR	-8V ≤ Vi ≤ -18V, f=120Hz	0~125	54	60		dB
Dropout Voltage	Vd	Io=1A	25		1.1		V
Peak Current	Ipk		25		2.0		A



TYPICAL APPLICATION





■ Block Diagram

