

Three-terminal positive voltage regulator

FEATURES

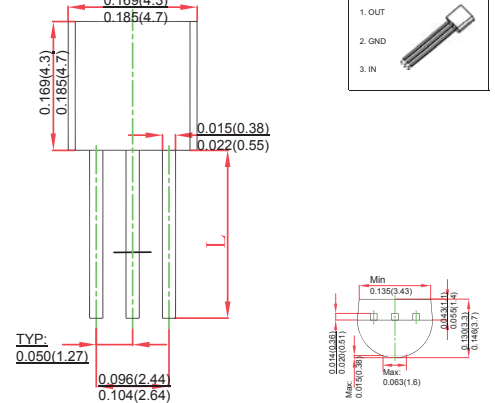
- Maximum output current I_{OM}: 0.1A
- Output voltage V_O: -8V
- Continuous total dissipation

$$P_D: 0.625 \text{ W (} T_a = 25 \text{ } ^\circ\text{C)}$$

MECHANICAL DATA

- Case: TO-92 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

TO-92



ABSOLUTE MAXIMUM RATINGS

(Operating temperature range applies unless otherwise specified)

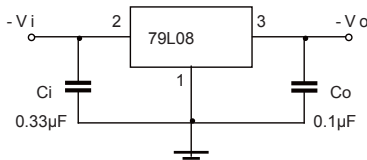
Parameter	Symbol	Value	Unit
Input Voltage	V _i	-30	V
Thermal Resistance from Junction to Ambient	R _{θJA}	200	°C/W
Operating Junction Temperature Range	T _{OPR}	0~+150	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE (V_i=-14V, I_o=40mA, C_i=0.33μF, C_o=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V _o	25°C	-7.68	-8.0	-8.32	V	
		-10.5VKV _i K-23V, I _o =1mA~40mA	0-125°C	-7.6	-8.0	-8.4	V
		I _o =1mA~70mA		-7.6	-8.0	-8.4	V
Load Regulation	γ V _o	I _o =1mA~100mA	25°C	30	100	mV	
		I _o =1mA~40mA	25°C	15	50	mV	
Line Regulation	γ V _o	-10.5VKV _i K-23V	25°C	42	200	mV	
		-11VKV _i K-23V	25°C	36	150	mV	
Quiescent Current	I _q	25°C		4	6	mA	
Quiescent Current Change	γ I _q	-11VKV _i K-23V	0-125°C		1.5	mA	
		1mA K _i K40mA	0-125°C		0.1	mA	
Output Noise Voltage	V _N	10Hz K f K100KHz	25°C	54		μV/V _o	
Ripple Rejection	RR	-11VKV _i K-21V, f=120Hz	0-125°C	37	46	dB	
Dropout Voltage	V _d	25°C		1.7		V	

* Pulse test.

TYPICAL APPLICATION

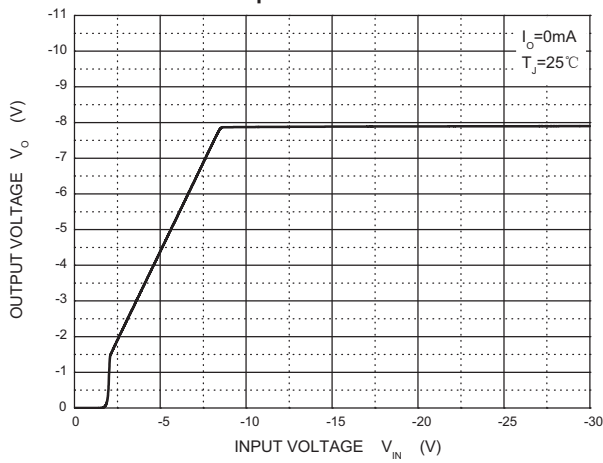


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

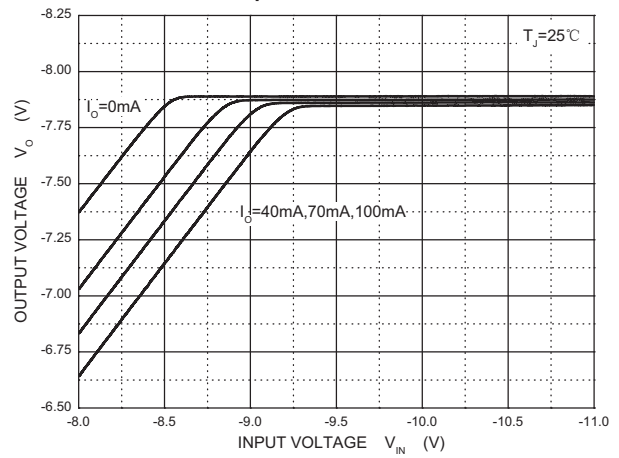
RATINGS AND CHARACTERISTIC CURVES

TYPICAL APPLICATION

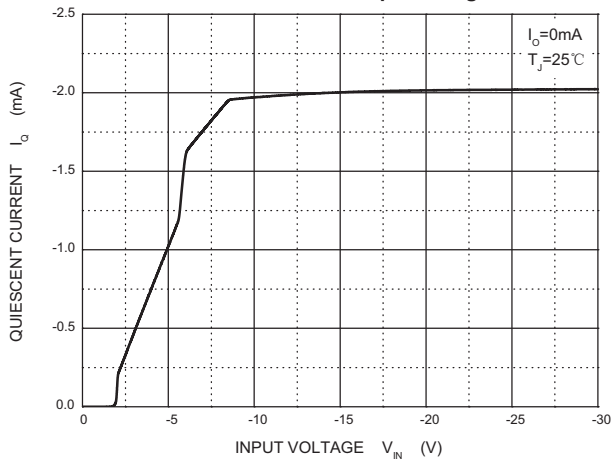
Output Characteristics



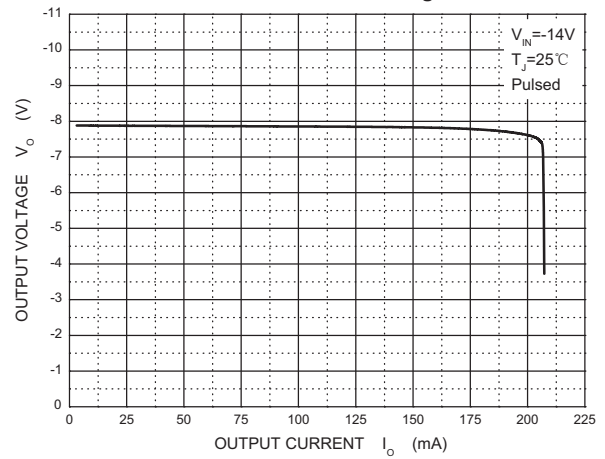
Dropout Characteristics



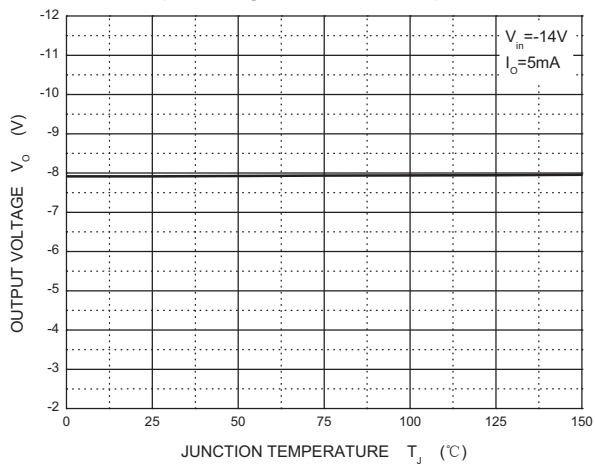
Quiescent Current vs Input Voltage



Current Cut-off Grid Voltage



Output Voltage vs Junction Temperature



Power Derating Curve

