

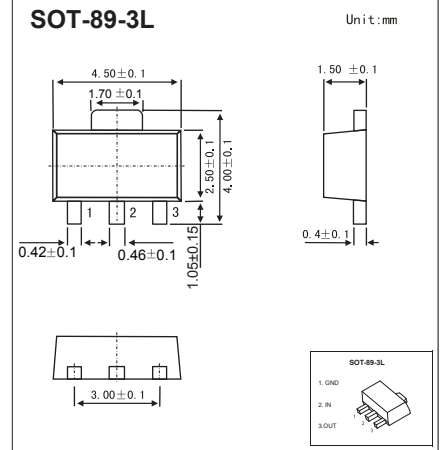
## Three-terminal positive voltage regulator

### FEATURES

- Maximum output current IOM: 0.1A
- Output voltage VO: -8V
- Continuous total dissipation  
PD: 0.6 W ( T<sub>a</sub> = 25 °C )

### MECHANICAL DATA

- Case: SOT-89 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



### ABSOLUTE MAXIMUM RATINGS

(Operating temperature range applies unless otherwise specified)

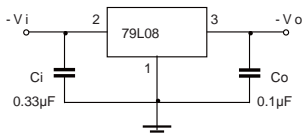
Parameter	Symbol	Value	Unit
Input Voltage	V <sub>i</sub>	-30	V
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	208.3	°C/W
Operating Junction Temperature Range	T <sub>OPR</sub>	0~+150	°C
Storage Temperature Range	T <sub>STG</sub>	-65~+150	°C

### ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE (V<sub>I</sub> = -14V, I<sub>o</sub> = 40mA, C<sub>i</sub> = 0.33μF, C<sub>o</sub> = 0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V <sub>o</sub>	25°C	-7.68	-8.0	-8.32	V	
		0-125°C	-10.5V ≤ V <sub>i</sub> ≤ -23V, I <sub>o</sub> = 1mA~40mA	-7.6	-8.0	-8.4	V
			I <sub>o</sub> = 1mA~70mA	-7.6	-8.0	-8.4	V
Load Regulation	ΔV <sub>o</sub>	I <sub>o</sub> = 1mA~100mA	25°C	30	100	mV	
		I <sub>o</sub> = 1mA~40mA	25°C	15	50	mV	
Line Regulation	ΔV <sub>o</sub>	-10.5V ≤ V <sub>i</sub> ≤ -23V	25°C	42	200	mV	
		-11V ≤ V <sub>i</sub> ≤ -23V	25°C	36	150	mV	
Quiescent Current	I <sub>q</sub>	25°C		4	6	mA	
Quiescent Current Change	ΔI <sub>q</sub>	-11V ≤ V <sub>i</sub> ≤ -23V	0-125°C		1.5	mA	
		1mA ≤ I <sub>o</sub> ≤ 40mA	0-125°C		0.1	mA	
Output Noise Voltage	V <sub>N</sub>	10Hz ≤ f ≤ 100KHz	25°C	54		μV/V <sub>o</sub>	
Ripple Rejection	RR	-11V ≤ V <sub>i</sub> ≤ -21V, f = 120Hz	0-125°C	37	46	dB	
Dropout Voltage	V <sub>d</sub>	25°C		1.7		V	

\* Pulse test.

### TYPICAL APPLICATION

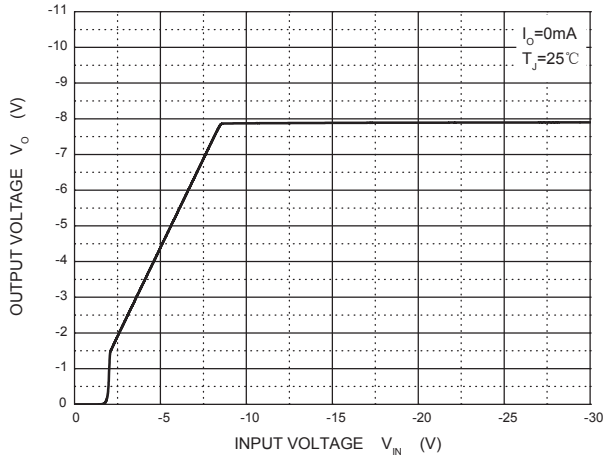


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

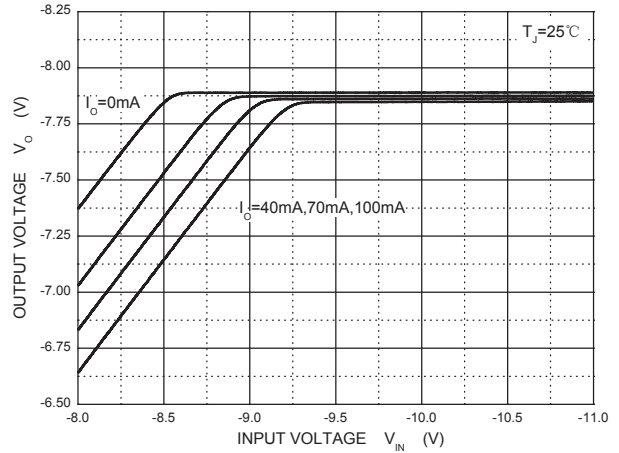
# RATINGS AND CHARACTERISTIC CURVES

## TYPICAL APPLICATION

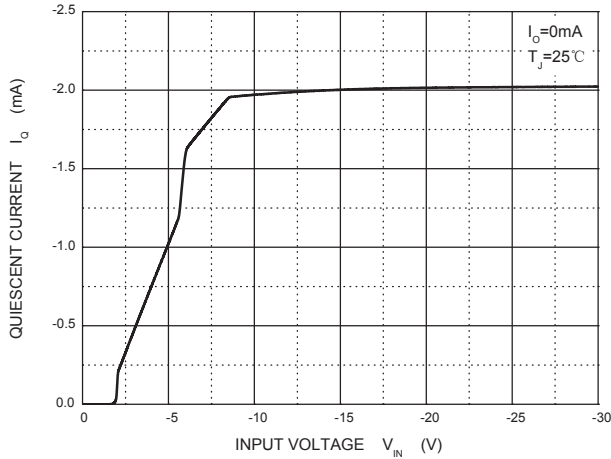
**Output Characteristics**



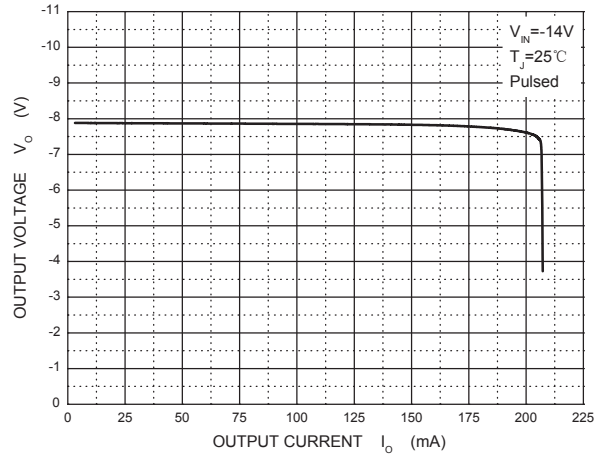
**Dropout Characteristics**



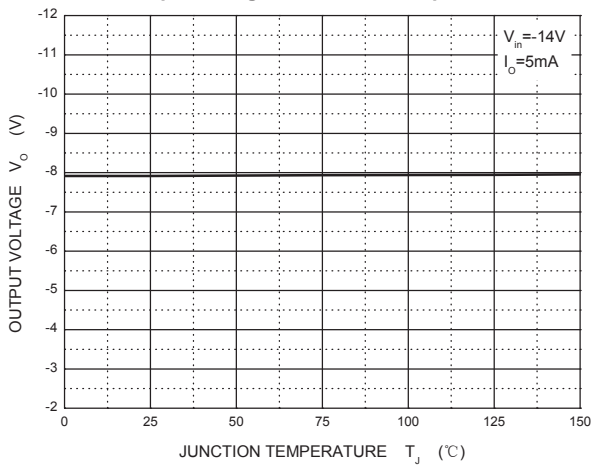
**Quiescent Current vs Input Voltage**



**Current Cut-off Grid Voltage**



**Output Voltage vs Junction Temperature**



**Power Derating Curve**

