

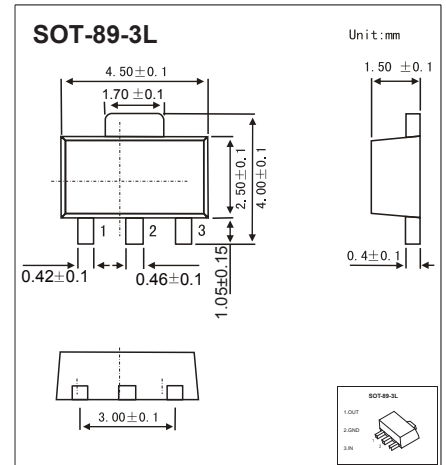
## Three-terminal positive voltage regulator

### FEATURES

- Maximum output current IOM: 0.1 A
- Output voltage VO: -9V
- Continuous total dissipation  
PD: 0.6W ( 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)

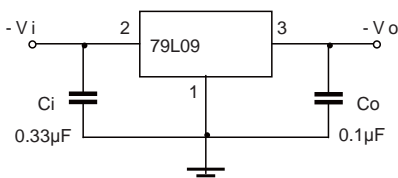
Parameter	Symbol	Value	Unit
Input Voltage	V <sub>i</sub>	-30	V
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	208.3	°C/W
Operating Junction Temperature Range	T <sub>OPR</sub>	0~+150	°C
Storage Temperature Range	T <sub>STG</sub>	-65~+150	°C

### ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE (V<sub>I</sub>=-10V, I<sub>o</sub>=40mA, C<sub>i</sub>=0.33μ F, 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	-8.64	-9.0	-9.36	V	
		0-125°C	-12V ≤ V <sub>i</sub> ≤ -24V, I <sub>o</sub> =1mA-40mA	-8.55	-9.0	-9.45	V
			I <sub>o</sub> =1mA-70mA	-8.55	-9.0	-9.45	V
Load Regulation	ΔV <sub>o</sub>	I <sub>o</sub> =1mA-100mA	25°C	19	90	mV	
		I <sub>o</sub> =1mA-40mA	25°C	11	40	mV	
Line Regulation	ΔV <sub>o</sub>	-12 V ≤ V <sub>i</sub> ≤ -24V	25°C	45	175	mV	
		-13V ≤ V <sub>i</sub> ≤ -24V	25°C	40	125	mV	
Quiescent Current	I <sub>q</sub>	25°C		4.1	6.0	mA	
Quiescent Current Change	ΔI <sub>q</sub>	-13V ≤ V <sub>i</sub> ≤ -24V	0-125°C		1.5	mA	
	ΔI <sub>q</sub>	1mA ≤ V <sub>i</sub> ≤ 40mA	0-125°C		0.1	mA	
Output Noise Voltage	V <sub>N</sub>	10Hz ≤ f ≤ 100KHz	25°C	58		μV/V <sub>o</sub>	
Ripple Rejection	RR	-15V ≤ V <sub>i</sub> ≤ -24V, f=120Hz	0-125°C	45		dB	
Dropout Voltage	V <sub>d</sub>	25°C		1.7		V	

\* Pulse test.

### TYPICAL APPLICATION



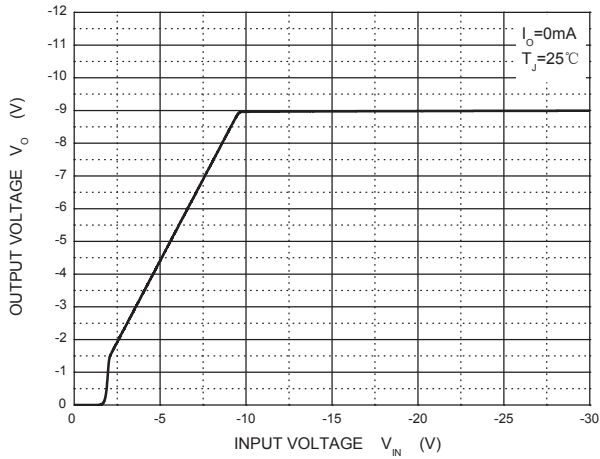
Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators



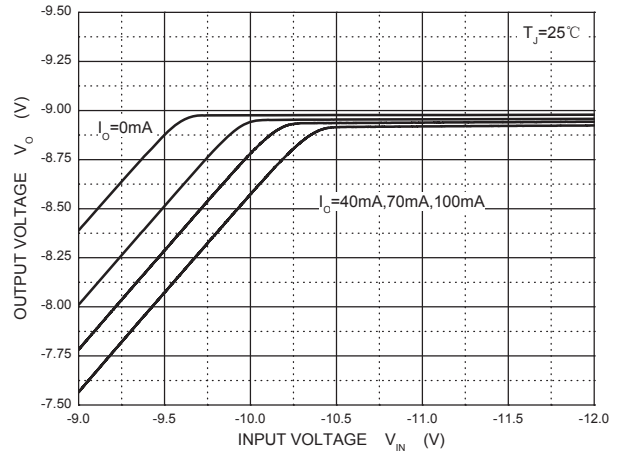
# RATINGS AND CHARACTERISTIC CURVES

## TYPICAL APPLICATION

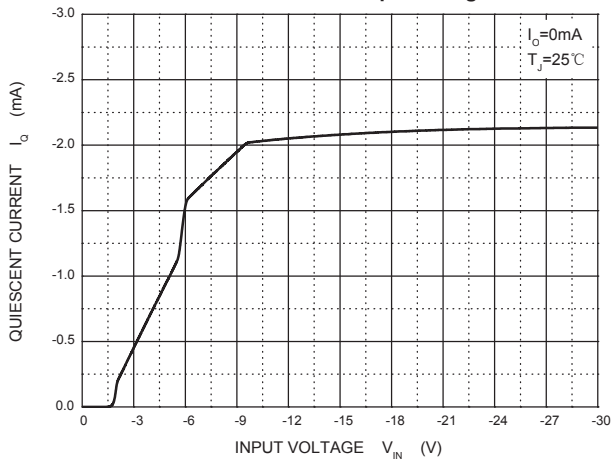
Output Characteristics



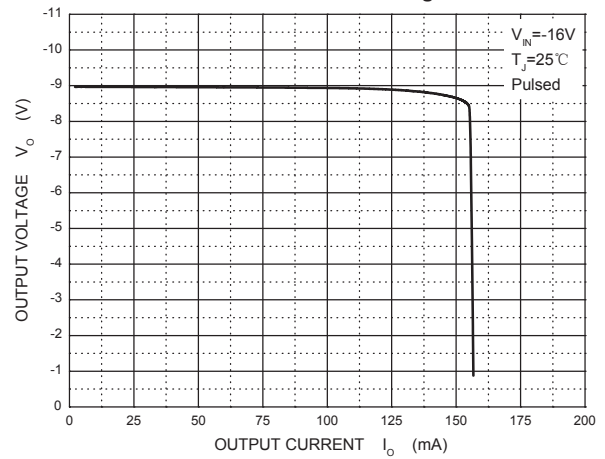
Dropout Characteristics



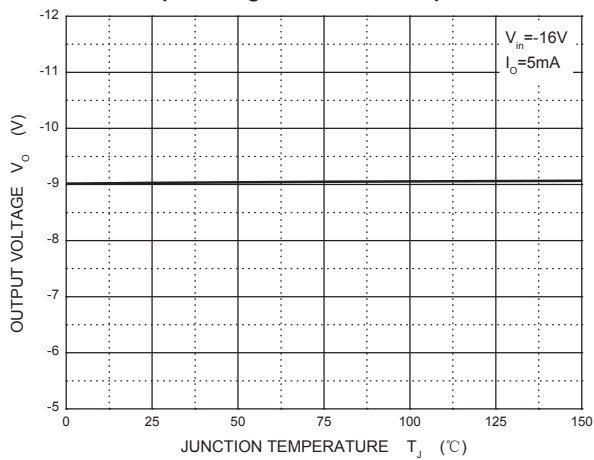
Quiescent Current vs Input Voltage



Current Cut-off Grid Voltage



Output Voltage vs Junction Temperature



Power Derating Curve

