

## Three-terminal positive voltage regulator

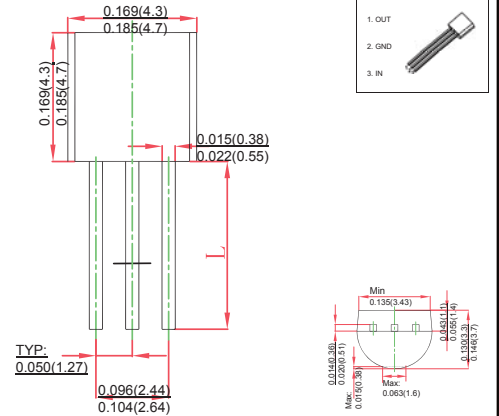
### FEATURES

- Maximum output current I<sub>OM</sub>: 0.1A
- Output voltage V<sub>O</sub>: -12V
- Continuous total dissipation  
P<sub>D</sub>: 0.625 W ( T<sub>a</sub> = 25 °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 <sub>i</sub>	-35	V
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	200	°C/W
Operating Junction Temperature Range	T <sub>OPR</sub>	0~+150	°C
Storage Temperature Range	T <sub>STG</sub>	-65~+150	°C

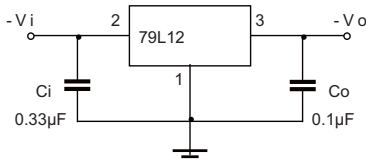
### ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

(V<sub>i</sub> = -19V, I<sub>o</sub> = 40mA, C<sub>i</sub> = 0.33 μF, C<sub>o</sub> = 0.1 μF, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V <sub>o</sub>	25°C	-11.52	-12	-12.48	V	
		0-125°C	-14.5V ≤ V <sub>i</sub> ≤ -27V, I <sub>o</sub> = 1mA~40mA	-11.4	-12	-12.6	V
			I <sub>o</sub> = 1mA~70mA	-11.4	-12	-12.6	V
Load Regulation	ΔV <sub>o</sub>	I <sub>o</sub> = 1mA~100mA, 25°C		24	100	mV	
		I <sub>o</sub> = 1mA~40mA, 25°C		15	50	mV	
Line Regulation	ΔV <sub>o</sub>	-14.5V ≤ V <sub>i</sub> ≤ -27V, 25°C		50	250	mV	
		-16V ≤ V <sub>i</sub> ≤ -27V, 25°C		40	200	mV	
Quiescent Current	I <sub>q</sub>	25°C			6.5	mA	
Quiescent Current Change	ΔI <sub>q</sub>	-16V ≤ V <sub>i</sub> ≤ -27V, 0-125°C			1.5	mA	
	ΔI <sub>q</sub>	1mA ≤ I <sub>o</sub> ≤ 40mA, 0-125°C			0.1	mA	
Output Noise Voltage	V <sub>N</sub>	10Hz ≤ f ≤ 100KHz, 25°C		80		μV/V <sub>o</sub>	
Ripple Rejection	RR	-15V ≤ V <sub>i</sub> ≤ -25V, f = 120Hz, 0-125°C	37	42		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

