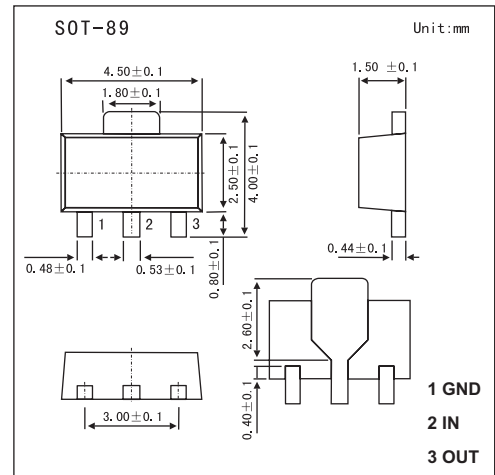


## Three-terminal negative voltage regulator

## LM79L06

## ■ Features

- Maximum output current  $I_{om}$ : 0.1A.
- Output voltage  $V_o$ : -6V.
- Continuous total dissipation  $P_d$ : 0.5 W

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Input Voltage	$V_i$	-30	V
Operating junction temperature range	$T_{OPR}$	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics ( $V_i = -11\text{V}$ ,  $I_o = 40\text{mA}$ ,  $0^\circ\text{C} < T_j < 125^\circ\text{C}$ ,  $C_1 = 0.33 \mu\text{F}$ ,  $C_o = 0.1 \mu\text{F}$ , unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$T_j = 25^\circ\text{C}$	-5.75	-6.0	-6.25	V
		$-8\text{V} \leq V_i \leq -20\text{V}$ , $I_o = 1\text{mA} - 40\text{mA}$	-5.7	-6.0	-6.3	V
		$I_o = 1\text{mA} - 70\text{mA}$	-5.7	-6.0	-6.3	V
Load regulation	$\Delta V_o$	$T_j = 25^\circ\text{C}$ , $I_o = 1\text{mA} - 100\text{mA}$		21	80	mV
		$T_j = 25^\circ\text{C}$ , $I_o = 1\text{mA} - 40\text{mA}$		11	40	mV
Line regulation	$\Delta V_o$	$-8\text{V} \leq V_i \leq -20\text{V}$ , $T_j = 25^\circ\text{C}$		20	175	mV
		$-9\text{V} \leq V_i \leq -20\text{V}$ , $T_j = 25^\circ\text{C}$		15	125	mV
Quiescent current	$I_q$	$25^\circ\text{C}$		3.9	6.0	mA
Quiescent current change	$\Delta I_q$	$0^\circ\text{C} < T_j < 125^\circ\text{C}$ , $-9\text{V} \leq V_i \leq -20\text{V}$			1.5	mA
		$0^\circ\text{C} < T_j < 125^\circ\text{C}$ , $1\text{mA} \leq I_o \leq 40\text{mA}$			0.1	mA
Output noise voltage	$V_n$	$10\text{Hz} \leq f \leq 100\text{kHz}$ , $T_j = 25^\circ\text{C}$		44		$\mu\text{V}$
Ripple rejection	RR	$-9\text{V} \leq V_i \leq -19\text{V}$ , $f = 120\text{Hz}$	40	48		dB
Dropout voltage	$V_d$	$T_j = 25^\circ\text{C}$		1.7		V

## ■ Typical Application

