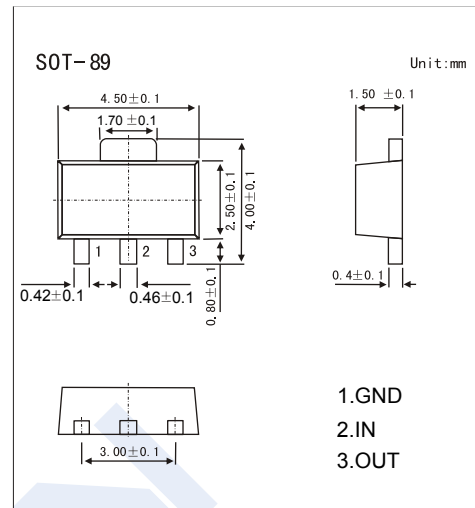


## Three-Terminal Negative Voltage Regulator

## LM79L12

## ■ Features

- Maximum Output current  $I_{OM}$ : 0.1 A
- Output voltage  $V_o$ : -12 V
- Continuous total dissipation  $P_D$ : 0.5 W

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

Parameter	Symbol	Rating	Unit
Input Voltage	$V_I$	-35	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 ( $V_I=19\text{V}$ ,  $I_o=40\text{mA}$ ,  $0^\circ\text{C}<T_j<125^\circ\text{C}$ ,  $C_1=0.33\ \mu\text{F}$ ,  $C_o=0.1\ \mu\text{F}$ , unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$T_j=25^\circ\text{C}$	-11.5	-12	-12.5	V
		$-14.5\text{V}\leq V_I\leq -27\text{V}$ , $I_o=1\text{mA}-40\text{mA}$	-11.4	-12	-12.6	V
		$I_o=1\text{mA}-70\text{mA}$	-11.4	-12	-12.6	V
Load Regulation	$\Delta V_o$	$T_j=25^\circ\text{C}$ , $I_o=1\text{mA}$ to 100mA		24	100	mV
		$T_j=25^\circ\text{C}$ , $I_o=1\text{mA}$ to 40mA		15	50	mV
Line regulation	$\Delta V_o$	$-14.5\text{V}\leq V_I\leq -27\text{V}$ , $T_j=25^\circ\text{C}$		50	250	mV
		$-16\text{V}\leq V_I\leq -27\text{V}$ , $T_j=25^\circ\text{C}$		40	200	mV
Quiescent Current	$I_q$	$25^\circ\text{C}$			6.5	mA
Quiescent Current Change	$\Delta I_q$	$0^\circ\text{C}<T_j<125^\circ\text{C}$ , $-16\text{V}\leq V_I\leq -27\text{V}$			1.5	mA
	$\Delta I_q$	$0^\circ\text{C}<T_j<125^\circ\text{C}$ , $1\text{mA}\leq I_o\leq 40\text{mA}$			0.1	mA
Output Noise Voltage	$V_N$	$10\text{Hz}\leq f\leq 100\text{KHz}$ , $T_j=25^\circ\text{C}$		80		$\mu\text{V}$
Ripple Rejection	$R_R$	$-15\text{V}\leq V_I\leq -25\text{V}$ , $f=120\text{Hz}$	37	42		dB
Dropout Voltage	$V_d$	$T_j=25^\circ\text{C}$		1.7		V

## ■ Typical Application

