

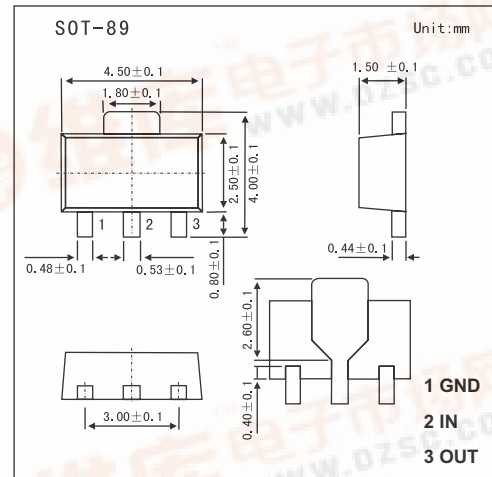
SMD Type IC

## 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

