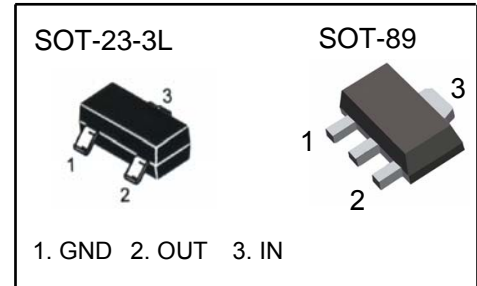


## Three-terminal negative voltage regulator

Maximum output current  $I_O$ : 0.1 A  
 Output voltage  $V_O$ : -12 V  
 Continuous total dissipation  
 $P_D$ : SOT-23-3L 0.35 W ( $T_a = 25^\circ\text{C}$ )  
 SOT-89 0.5 W ( $T_a = 25^\circ\text{C}$ )



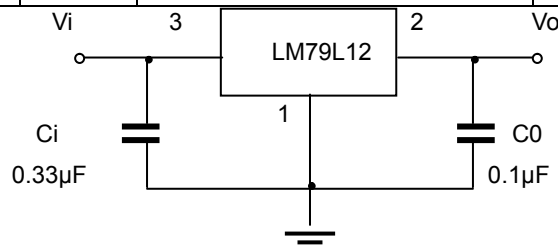
### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	$V_I$	-35	V
Operating Junction Temperature Range	$T_{OPR}$	0~+125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55~+150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ( $V_I = 19\text{V}, I_O = 40\text{mA}, C_i = 0.33\mu\text{F}, C_o = 0.1\mu\text{F}$ , unless otherwise specified)

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

### TYPICAL APPLICATION



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

## Typical Characteristics

