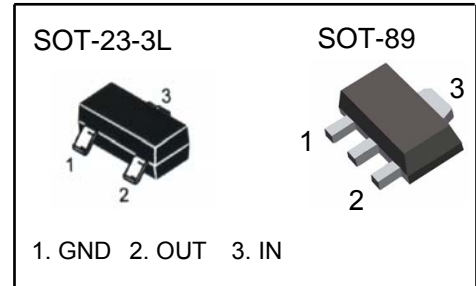


Three-terminal negative voltage regulator

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 ($T_a=25^\circ\text{C}$)



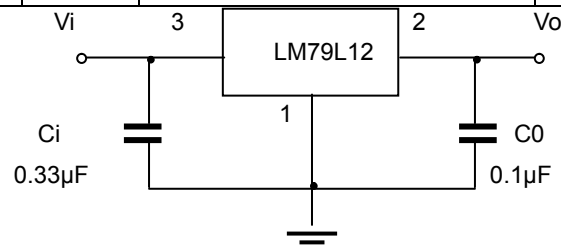
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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°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	ΔV_O	$I_O=1\text{mA} \sim 100\text{mA}$ 25°C		24	100	mV
		$I_O=1\text{mA} \sim 40\text{mA}$ 25°C		15	50	mV
Line regulation	ΔV_O	$-14.5\text{V} \leq V_I \leq -27\text{V}$ 25°C		50	250	mV
		$-16\text{V} \leq V_I \leq -27\text{V}$ 25°C		40	200	mV
Quiescent Current	I_q	25°C			6.5	mA
Quiescent Current Change	ΔI_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°C		80		μV
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°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

