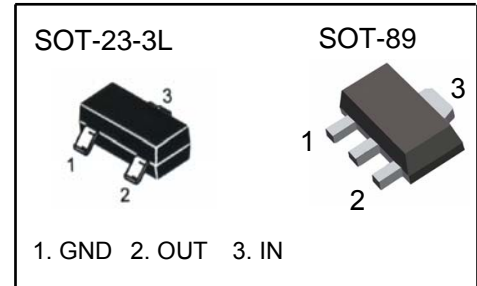


Three-terminal negative voltage regulator

Maximum output current I_O : 0.1 A
 Output voltage V_O : -8 V
 Continuous total dissipation
 P_D : SOT-23-3L 0.35 W ($T_a = 25^\circ\text{C}$)
 SOT-89 0.5 W ($T_a = 25^\circ\text{C}$)



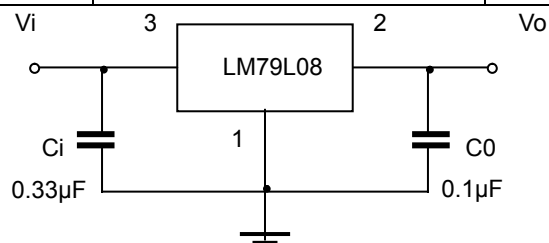
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	V_i	-30	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 ($V_i = -14\text{V}$, $I_o = 40\text{mA}$, $C_i = 0.33\mu\text{F}$, $C_o = 0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT	
Output voltage	V_o	25°C	-7.7	-8.0	-8.3	V	
		0-125 $^\circ\text{C}$	$-10.5\text{V} \leq V_i \leq -23\text{V}$, $I_o = 1\text{mA} \sim 40\text{mA}$	-7.6	-8.0	-8.4	V
			$I_o = 1\text{mA} \sim 70\text{mA}$	-7.6	-8.0	-8.4	V
Load Regulation	ΔV_o	$I_o = 1\text{mA} \sim 100\text{mA}$	25°C	30	100	mV	
		$I_o = 1\text{mA} \sim 40\text{mA}$	25°C	15	50	mV	
Line regulation	ΔV_o	$-10.5\text{V} \leq V_i \leq -23\text{V}$	25°C	42	200	mV	
		$-11\text{V} \leq V_i \leq -23\text{V}$	25°C	36	150	mV	
Quiescent Current	I_q	25°C		4	6	mA	
Quiescent Current Change	ΔI_q	$-11\text{V} \leq V_i \leq -23\text{V}$	0-125 $^\circ\text{C}$		1.5	mA	
	ΔI_q	$1\text{mA} \leq I_o \leq 40\text{mA}$	0-125 $^\circ\text{C}$		0.1	mA	
Output Noise Voltage	V_N	10Hz $\leq f \leq$ 100KHz	25°C	54		μV	
Ripple Rejection	RR	$-11\text{V} \leq V_i \leq -21\text{V}$, $f = 120\text{Hz}$	0-125 $^\circ\text{C}$	37	46	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

