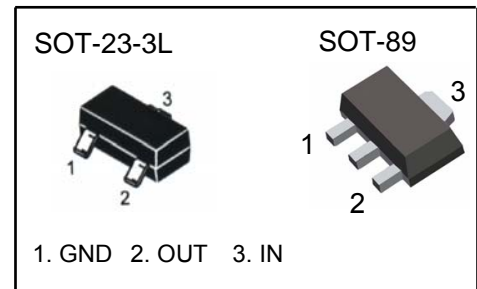


Three-terminal negative voltage regulator

Maximum output current I_O : 0.1 A
 Output voltage V_O : -5 V
 Continuous total dissipation
 P_D : SOT-23-3L 0.35 W ($T_a=25^\circ\text{C}$)
 SOT-89 0.5 W ($T_a=25^\circ\text{C}$)



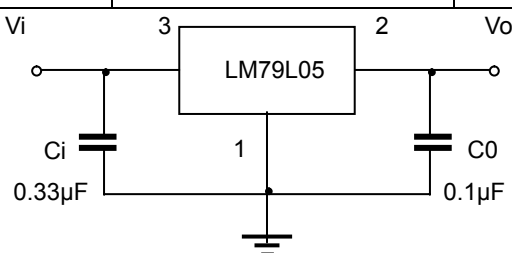
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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 ($V_i=-10\text{V}, I_o=40\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT	
Output voltage	V_o	25°C	-4.8	-5.0	-5.2	V	
		0-125 $^\circ\text{C}$	$-7\text{V} \leq V_i \leq -20\text{V}, I_o=1\text{mA} \sim 40\text{mA}$	-4.75	-5.0	-5.25	V
			$I_o=1\text{mA} \sim 70\text{mA}$	-4.75	-5.0	-5.25	V
Load Regulation	ΔV_o	$I_o=1\text{mA} \sim 100\text{mA}$ 25°C		20	60	mV	
		$I_o=1\text{mA} \sim 40\text{mA}$ 25°C		10	30	mV	
Line regulation	ΔV_o	$-7\text{V} \leq V_i \leq -20\text{V}$ 25°C		15	150	mV	
		$-8\text{V} \leq V_i \leq -20\text{V}$ 25°C		12	100	mV	
Quiescent Current	I_q	25°C			6	mA	
Quiescent Current Change	ΔI_q	$-8\text{V} \leq V_i \leq -20\text{V}$ 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	10Hz $\leq f \leq$ 100KHz 25°C		40		μV	
Ripple Rejection	RR	$-8\text{V} \leq V_i \leq -18\text{V}, f=120\text{Hz}$ 0-125 $^\circ\text{C}$	41	49		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

