



SOT-89 Encapsulate Three Terminal Voltage Regulators

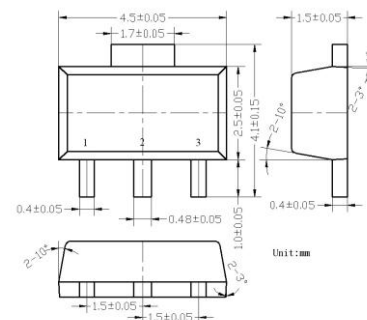
79L12 Three-terminal negative regulator

Features:

- Maximum output current
 I_{OM} : 0.1A
- Output voltage
 V_O : -12V
- Continuous total dissipation
 P_D : 0.5W

ABSOLUTE MAXIMUM RATINGS(operating temperature range applies unless otherwise noted)

Parameter	Symbol	Value	Unit
Input voltage	V_I	-35	V
Operating Junction Temperature	T_{OPR}	-40~+125	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

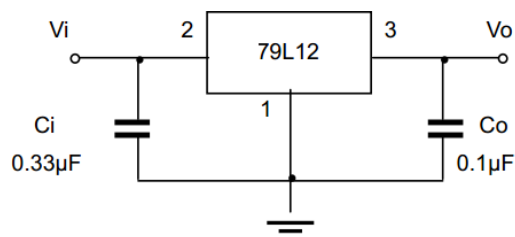


1. GND
2. IN
3. OUT

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_O	25°C	-11.5	-12	-12.5	V
		-14.5V≤ V_I ≤-27V, $I_O=1mA \sim 40mA$	-11.4	-12	-12.6	V
		$I_O=1mA \sim 70mA$	-11.4	-12	-12.6	V
Load Regulation	ΔV_O	$I_O=1mA \sim 100mA$		24	100	mV
		$I_O=1mA \sim 40mA$		15	50	mV
Line Regulation	ΔV_O	-14.5V≤ V_I ≤-27V		50	250	mV
		-16V≤ V_I ≤-27V		40	200	mV
Quiescent Current	I_q	25°C			6.5	mA
Quiescent Current Change	ΔI_q	-16V≤ V_I ≤-27V			1.5	mA
	ΔI_q	1mA≤ I_O ≤40mA			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz		80		μV
Ripple Rejection	RR	-15V≤ V_I ≤-25V, f=120Hz	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

Figure 1. Dropout Characteristics

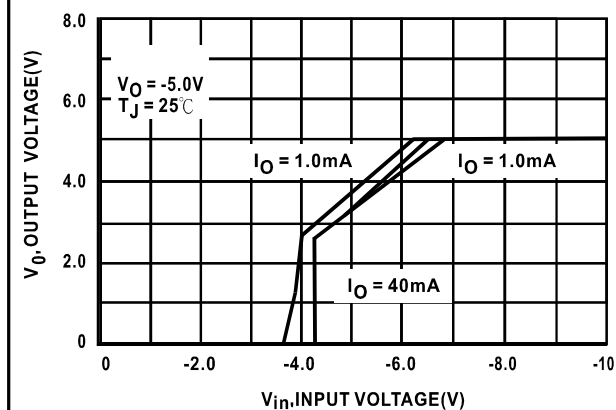


Figure 2. Dropout Voltage versus Junction Temperature

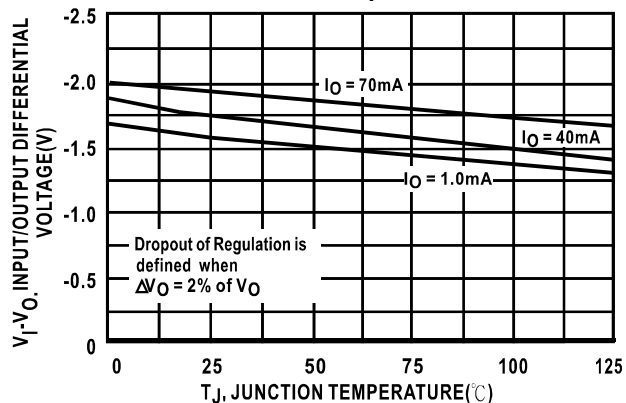


Figure 3. Input Bias Current versus Ambient Temperature

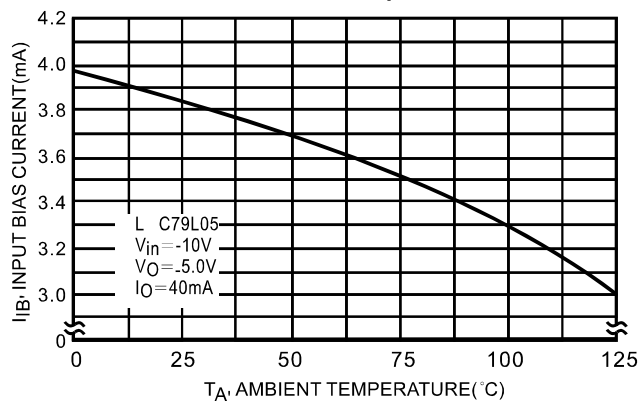


Figure 4. Input Bias Current versus Input Voltage

