

TO-92 Encapsulate Three-terminal Voltage Regulator

79L15 Three-terminal negative voltage regulator

FEATURES

Maximum Output current

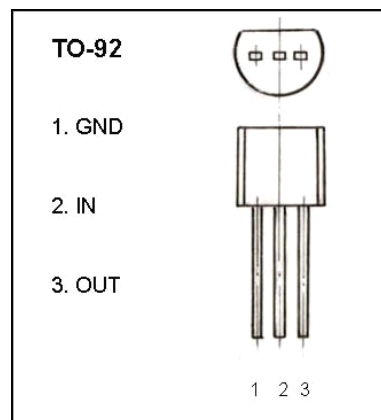
LOM: 100mA

Output voltage

Vo: -15V

Continuous total dissipation

PD: 0.625 W



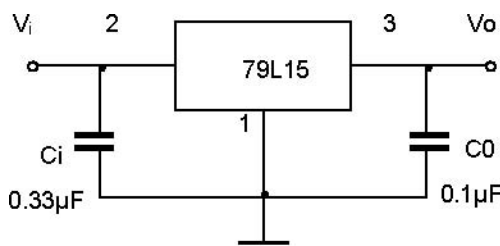
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	V_i	-35	V
Operating Junction Temperature Range	T_{OPR}	0~+125	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS ($V_i=-23V, I_o=40mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	25°C	-14.4	-15	-15.6	V
		-17.5V ≤ V_i ≤ -30V, $I_o=1mA\sim 40mA$	-14.25	-15	-15.75	V
		$I_o=1mA\sim 70mA$, 0-125°C	-14.25	-15	-15.75	V
Load Regulation	ΔV_o	$I_o=1mA\sim 100mA, V_i=-23V$, 25°C		25	150	mV
		$I_o=1mA\sim 40mA, V_i=-23V$, 25°C		15	75	mV
Line regulation	ΔV_o	-17.5V ≤ V_i ≤ -30V, $I_o=40mA$, 25°C		65	300	mV
		-20V ≤ V_i ≤ -30V, $I_o=40mA$, 25°C		50	250	mV
Quiescent Current	I_q	25°C			6.5	mA
Quiescent Current Change	ΔI_q	-20V ≤ V_i ≤ -30V, $I_o=40mA$, 0-125°C			1.5	mA
	ΔI_q	1mA ≤ I_o ≤ 40mA, 0-125°C			0.1	mA
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz, 25°C		90		μV
Ripple Rejection	RR	-18.5V ≤ V_i ≤ -28.5V, $f=120Hz$, 0-125°C	34	39		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

