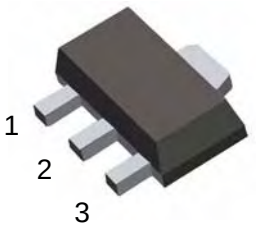
79L15

Three-terminal negative voltage regulator

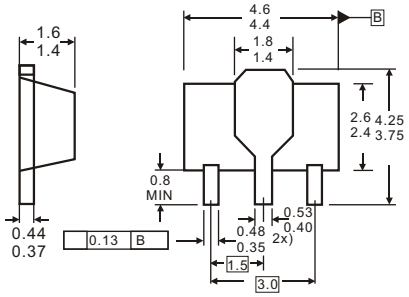
SOT-89

Features

- ✧ Maximum Output current
  $I_{OM:}$ 100 mA
- ✧ Output voltage
  V_O: -15 V
- ✧ Continuous total dissipation
  P_D: 0.5 W



1. GND
2. IN
3. OUT



Dimensions in inches and (millimeters)

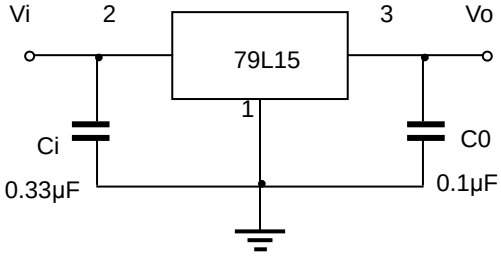
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

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

ELECTRICAL CHARACTERISTICS (Vi=-23V, Io=40mA,Ci=0.33μF,Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions		MIN	TYP	MAX	UNIT
Output voltage	Vo		25℃	-14.4	-15	-15.6	V
		-17.5V≤V_i≤-30V, Io=1mA~40mA	0-125℃	-14.25	-15	-15.75	V
		Io=1mA~70mA		-14.25	-15	-15.75	V
Load Regulation	ΔVo	Io=1mA~100mA, V_i=-23V	25℃		25	150	mV
		Io=1mA~40mA, V_i=-23V	25℃		15	75	mV
Line regulation	ΔVo	-17.5V≤Vi≤-30V,Io=40mA	25℃		65	300	mV
		-20V≤Vi≤-30V,Io=40mA	25℃		50	250	mV
Quiescent Current	Iq		25℃			6.5	mA
Quiescent Current Change	ΔIq	-20V≤Vi≤-30V, Io=40mA	0-125℃			1.5	mA
	ΔIq	1mA≤I_O≤40mA	0-125℃			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz	25℃		90		μV
Ripple Rejection	RR	-18.5V≤Vi≤-28.5V,f=120Hz	0-125℃	34	39		dB
Dropout Voltage	Vd		25℃		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.

79L15

Three-terminal negative voltage regulator

TypicalCharacteristics