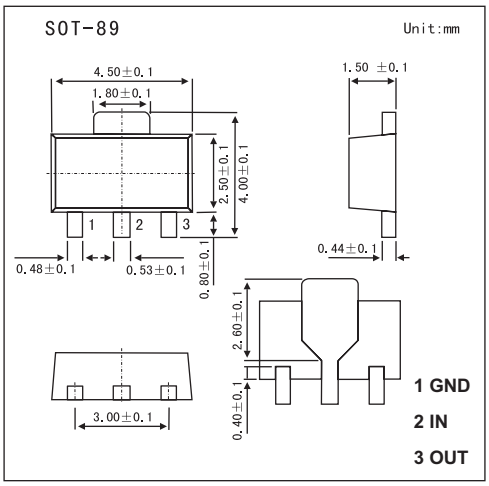
Three-terminal Negative Voltage Regulator

LM79L15



■ Features

- Maximum Output current I_{OM}: 0.1 A
- Output voltage V_O: -15V
- Continuous total dissipation P_D: 0.5 W

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Input Voltage	V_I	-35	V
Operating Junction Temperature Range	T_{OPR}	-55 to +125	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

■ Electrical Characteristics (V_I=-23V,I_O=40mA,0℃<Tj<125℃ ,C1=0.33μF,C_O=0.1μF, unless otherwise specified)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Output voltage	V_O	Tj=25℃	-14.4	-15	-15.6	V
		-17.5V≤V_I≤-30V, I_O=1mA-40mA	-14.25	- 15	-15.75	V
		I_O=1mA-70mA	-14.25	-15	-15.75	V
Load Regulation	$\triangle V_O$	Tj=25℃ , I_O=1mA to 100mA,V_I=-23V		25	150	mV
		Tj=25 ℃ , I_O=1mA to 40mA,V_I=-23V		15	75	mV
Line regulation	$\triangle V_O$	-17.5 V≤V_I≤-30V, Tj=25℃,I_O=40mA		65	300	mV
		-20V≤V_I≤-30V, Tj=25 ℃,I_O=40mA		50	250	mV
Quiescent Current	I_q	25℃			6.5	mA
Quiescent Current Change	$\triangle I_q$	0℃<Tj<125℃, -20V≤V_I≤-30V,I_O=40mA			1.5	mA
	$\triangle I_q$	0℃<Tj<125℃,1mA≤I_O≤40mA			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz,Tj=25℃		90		uV
Ripple Rejection	R_R	-18.5V≤V_I≤-28.5V,f=120Hz	34	39		dB
Dropout Voltage	V_d	Tj=25℃		1.7		V

■ Typical Application

