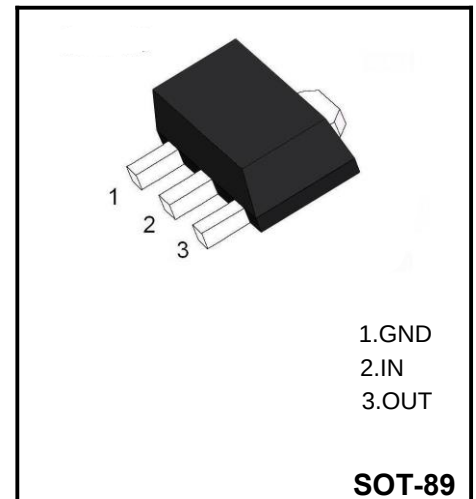


Three-Terminal Negative Voltage Regulator

Features

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



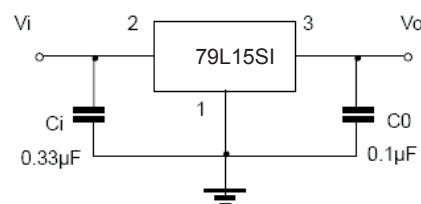
Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Input Voltage	V_i	-35	V
Operating Junction Temperature Range	T_{OPR}	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics ($T_a=25^\circ\text{C}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V_o	$T_j=25^\circ\text{C}$	-14.4	-15	-15.6	V
		$-17.5\text{V} \leq V_i \leq -30\text{V}, I_o=1\text{mA}-40\text{mA}$	-14.25	-15	-15.75	V
		$I_o=1\text{mA}-70\text{mA}$	-14.25	-15	-15.75	V
Load Regulation	ΔV_o	$T_j=25^\circ\text{C}, I_o=1\text{mA to } 100\text{mA}, V_i=-23\text{V}$		25	150	mV
		$T_j=25^\circ\text{C}, I_o=1\text{mA to } 40\text{mA}, V_i=-23\text{V}$		15	75	mV
Line regulation	ΔV_o	$-17.5\text{V} \leq V_i \leq -30\text{V}, T_j=25^\circ\text{C}$		65	300	mV
		$-20\text{V} \leq V_i \leq -30\text{V}, T_j=25^\circ\text{C}$		50	250	mV
Quiescent Current	I_q	25°C			6.5	mA
Quiescent Current Change	ΔI_q	$0^\circ\text{C} < T_j < 125^\circ\text{C}, -20\text{V} \leq V_i \leq -30\text{V}$			1.5	mA
	ΔI_q	$0^\circ\text{C} < T_j < 125^\circ\text{C}, 1\text{mA} \leq I_o \leq 40\text{mA}$			0.1	mA
Output Noise Voltage	V_N	$10\text{Hz} \leq f \leq 100\text{KHz}, T_j=25^\circ\text{C}$		90		μV
Ripple Rejection	R_R	$-18.5\text{V} \leq V_i \leq -28.5\text{V}, f=120\text{Hz}$	34	39		dB
Dropout Voltage	V_d	$T_j=25^\circ\text{C}$		1.7		V

Typical applications



Ordering information

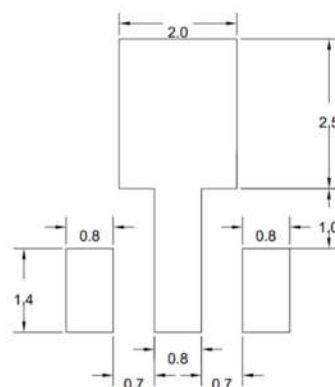
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

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