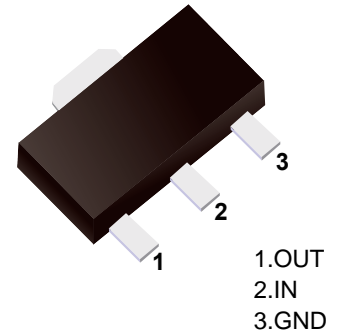


■ Three-Terminal Negative Voltage Regulator



■ Simplified outline(SOT-89)

■ Features

- Maximum output current  $I_{om}$ : 0.1A.
- Output voltage  $V_o$ : -6V.
- Continuous total dissipation  $P_d$ : 0.5 W

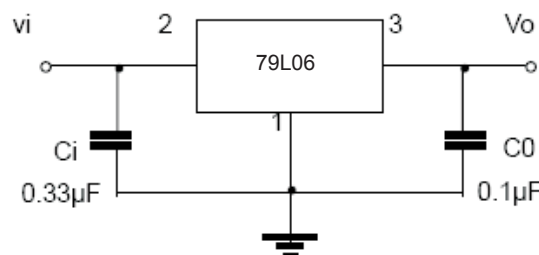
■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Input Voltage	$V_i$	-30	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 ( $V_i = -11\text{V}, I_o = 40\text{mA}, 0^\circ\text{C} < T_j < 125^\circ\text{C}, C_1 = 0.33 \mu\text{F}, C_o = 0.1 \mu\text{F}$ , unless otherwise specified)

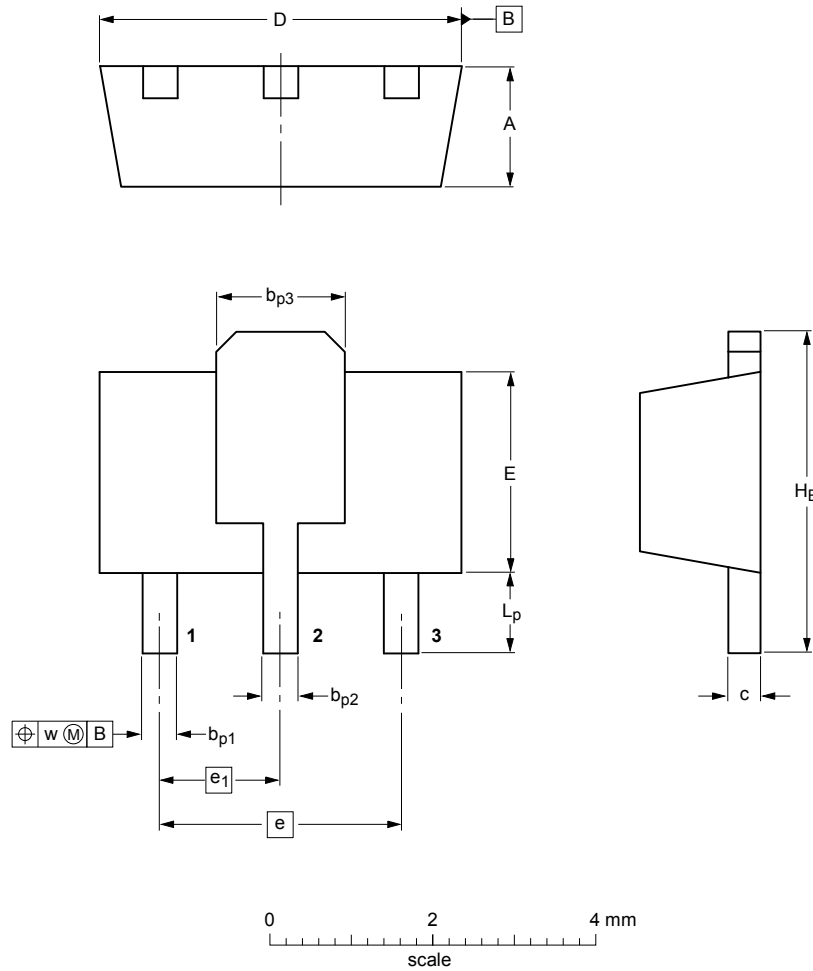
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$T_j = 25^\circ\text{C}$	-5.75	-6.0	-6.25	V
		$-8\text{V} \leq V_i \leq -20\text{V}, I_o = 1\text{mA} - 40\text{mA}$	-5.7	-6.0	-6.3	V
		$I_o = 1\text{mA} - 70\text{mA}$	-5.7	-6.0	-6.3	V
Load regulation	$\Delta V_o$	$T_j = 25^\circ\text{C}, I_o = 1\text{mA} - 100\text{mA}$		21	80	mV
		$T_j = 25^\circ\text{C}, I_o = 1\text{mA} - 40\text{mA}$		11	40	mV
Line regulation	$\Delta V_o$	$-8\text{V} \leq V_i \leq -20\text{V}, T_j = 25^\circ\text{C}$		20	175	mV
		$-9\text{V} \leq V_i \leq -20\text{V}, T_j = 25^\circ\text{C}$		15	125	mV
Quiescent current	$I_q$	$25^\circ\text{C}$		3.9	6.0	mA
Quiescent current change	$\Delta I_q$	$0^\circ\text{C} < T_j < 125^\circ\text{C}, -9\text{V} \leq V_i \leq -20\text{V}$			1.5	mA
		$0^\circ\text{C} < T_j < 125^\circ\text{C}, 1\text{mA} \leq I_o \leq 40\text{mA}$			0.1	mA
Output noise voltage	$V_n$	$10\text{Hz} \leq f \leq 100\text{kHz}, T_j = 25^\circ\text{C}$		44		$\mu\text{V}$
Ripple rejection	RR	$-9\text{V} \leq V_i \leq -19\text{V}, f = 120\text{Hz}$	40	48		dB
Dropout voltage	$V_d$	$T_j = 25^\circ\text{C}$		1.7		V

■ Typical Application



Package Outline

SOT-89



DIMENSIONS (mm are the original dimensions)

UNIT	A	bp1	bp2	bp3	c	D	E	e	e1	HE	Lp	w
mm	1.6 1.4	0.48 0.35	0.53 0.40	1.8 1.4	0.44 0.23	4.6 4.4	2.6 2.4	3.0	1.5	4.25 3.75	1.2 0.8	0.13

Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT-89	Tape/Reel, 7" reel	1000	EIA-481-1