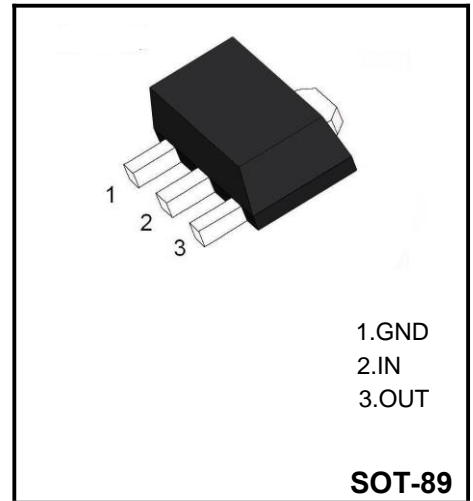


**Three-Terminal Negative Voltage Regulator**



**Features**

- Maximum Output current  $I_{OM}$ : 0.1 A
- Output voltage  $V_o$ : -5 V
- Continuous total dissipation  $P_D$ : 0.5 W

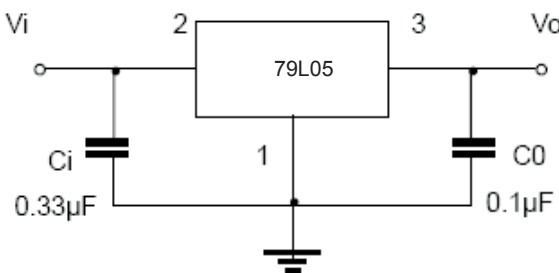
**Absolute Maximum Ratings (Ta=25°C)**

Parameter	Symbol	Rating	Unit
Input Voltage	$V_i$	-30	V
Operating Junction Temperature Range	$T_{OPR}$	-55 to +125	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

**Electrical Characteristics (Ta=25°C, unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$T_j=25^\circ\text{C}$	-4.8	-5.0	-5.2	V
		$-7\text{V} \leq V_i \leq -20\text{V}, I_o=1\text{mA}-40\text{mA}$	-4.75	-5.0	-5.25	V
		$I_o=1\text{mA}-70\text{mA}$	-4.75	-5.0	-5.25	V
Load regulation	$\Delta V_o$	$T_j=25^\circ\text{C}, I_o=1\text{mA}-100\text{mA}$		11	60	mV
		$T_j=25^\circ\text{C}, I_o=1\text{mA}-40\text{mA}$		5.0	30	mV
Line regulation	$\Delta V_o$	$-7\text{V} \leq V_i \leq -20\text{V}, T_j=25^\circ\text{C}$		32	150	mV
		$-8\text{V} \leq V_i \leq -20\text{V}, T_j=25^\circ\text{C}$		26	100	mV
Quiescent current	$I_q$	$T_j=25^\circ\text{C}$		3.8	6	mA
Quiescent current change	$\Delta I_q$	$0^\circ\text{C} < T_j < 125^\circ\text{C}, -8\text{V} \leq V_i \leq -20\text{V}$			1.5	mA
	$\Delta I_q$	$0^\circ\text{C} < T_j < 125^\circ\text{C}, 1\text{mA} \leq I_o \leq 40\text{mA}$			0.1	mA
Output noise voltage	$V_N$	$10\text{Hz} \leq f \leq 100\text{KHz}, T_j=25^\circ\text{C}$		42		uV
Ripple rejection	RR	$-8\text{V} \leq V_i \leq -18\text{V}, f=120\text{Hz}$	41	49		dB
Dropout voltage	$V_d$	$T_j=25^\circ\text{C},$		1.7		V

**Typical applications**



**Ordering information**

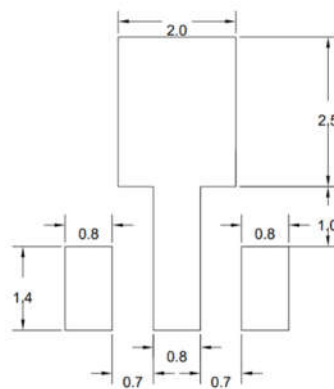
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel,7"reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

**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

## Disclaimer

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