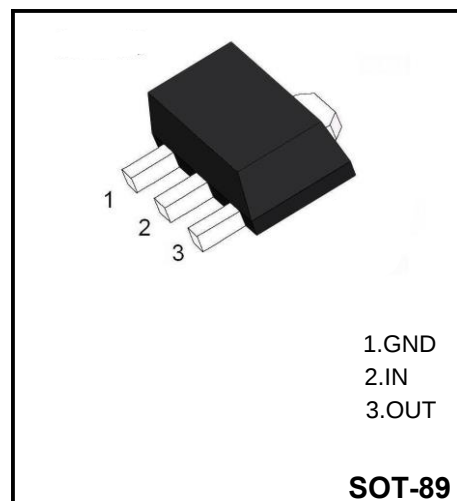


Encapsulate Three terminal voltage regulators

Three-terminal negative voltage regulator



FEATURES

- ◆ Maximum output current
 I_{OM} : 0.1 A
- ◆ Output voltage
 V_O : -12 V
- ◆ Continuous total dissipation
 P_D : 0.5 W

ABSOLUTE MAXIMUM RATINGS

(Operating temperature range applies unless otherwise specified)

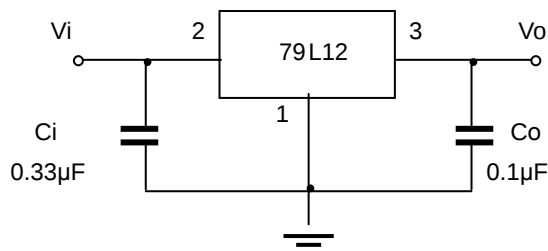
Parameter	Symbol	Value	Unit
Input Voltage	V_I	-35	V
Operating Junction Temperature Range	T_{OPR}	0~+150	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

($V_I=19V, I_O=40mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_O	25°C	-11.5	-12	-12.5	V
		-14.5V ≤ V_I ≤ -27V, $I_O=1mA \sim 40mA$	-11.4	-12	-12.6	V
		$I_O=1mA \sim 70mA$	-11.4	-12	-12.6	V
Load Regulation	ΔV_O	$I_O=1mA \sim 100mA$		24	100	mV
		$I_O=1mA \sim 40mA$		15	50	mV
Line Regulation	ΔV_O	-14.5V ≤ V_I ≤ -27V		50	250	mV
		-16V ≤ V_I ≤ -27V		40	200	mV
Quiescent Current	I_q	25°C			6.5	mA
Quiescent Current Change	ΔI_q	-16V ≤ V_I ≤ -27V			1.5	mA
	ΔI_q	$1mA \leq I_O \leq 40mA$			0.1	mA
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz		80		μV
Ripple Rejection	RR	-15V ≤ V_I ≤ -25V, $f=120Hz$	37	42		dB
Dropout Voltage	V_d	25°C		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.

Ordering information

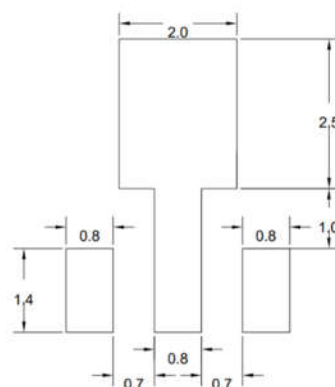
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

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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