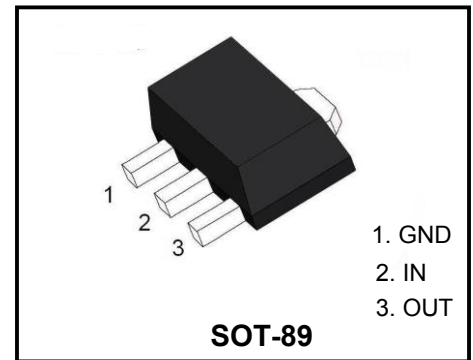


Encapsulate Three terminal voltage regulators

Three-terminal negative voltage regulator

FEATURES

- ◆ Maximum output current
 I_{OM} : 0.1 A
- ◆ Output voltage
 V_O : -9 V
- ◆ Continuous total dissipation
 P_D : 0.5W



Marking Code	
79L09SI	YFW 79L09

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

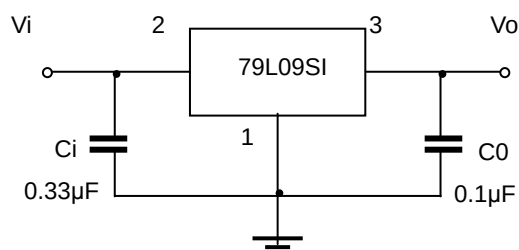
Parameter	Symbol	Value	Unit
Input Voltage	V_I	-30	V
Operating Junction Temperature Range	T_{OPR}	0—+150	°C
Storage Temperature Range	T_{STG}	-55—+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE

($V_I = -16V$, $I_O = 40mA$, $C_i = 0.33\mu F$, $C_o = 0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$25^\circ C$	-8.64	-9.0	-9.36	V
		$-12V \leq V_I \leq -24V$, $I_O = 1mA-40mA$	-8.55	-9.0	-9.45	V
		$I_O = 1mA-70mA$	-8.55	-9.0	-9.45	V
Load Regulation	ΔV_O	$I_O = 1mA-100mA$, $25^\circ C$		19	90	mV
		$I_O = 1mA-40mA$, $25^\circ C$		11	40	mV
Line Regulation	ΔV_O	$-12V \leq V_I \leq -24V$, $25^\circ C$		45	175	mV
		$-13V \leq V_I \leq -24V$, $25^\circ C$		40	125	mV
Quiescent Current	I_q	$25^\circ C$		4.1	6.0	mA
Quiescent Current Change	ΔI_q	$-13V \leq V_I \leq -24V$, $0-125^\circ C$			1.5	mA
	ΔI_q	$1mA \leq V_I \leq 40mA$, $0-125^\circ C$			0.1	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$, $25^\circ C$		58		μV
Ripple Rejection	RR	$-15V \leq V_I \leq -24V$, $f = 120Hz$, $0-125^\circ C$		45		dB
Dropout Voltage	V_d	$25^\circ C$		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

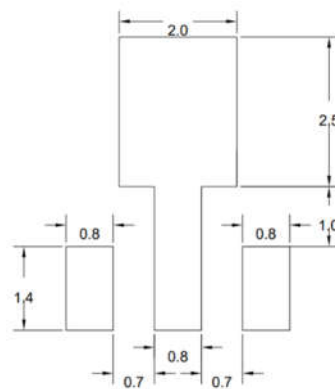
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

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

Disclaimer

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