

TO-92 Plastic-Encapsulate Transistors

79L09

CJ79L09 Three-terminal positive voltage regulator

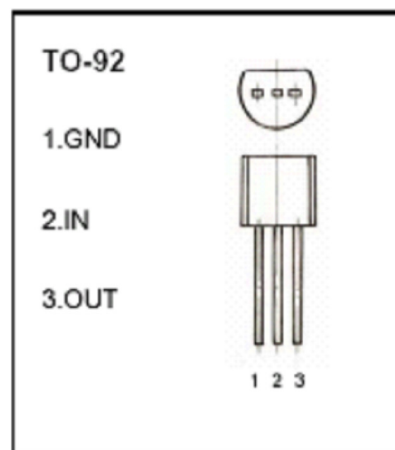
FEATURES

Maximum Output current

$$I_{OM}: 0.1 \text{ A}$$

Output voltage

$$V_o: -9 \text{ V}$$



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

Parameter	Symbol	Value	Units
Input Voltage	V_i	-30	V
Operating Junction Temperature Range	T_{OPR}	0—+125	°C
Storage Temperature Range	T_{STG}	-55—+150	°C

ELECTRICAL CHARACTERISTICS($V_i = -16\text{V}$, $I_o = 40\text{mA}$, $0^\circ\text{C} < T_j \leq 125^\circ\text{C}$, $C_1 = 0.33\mu\text{F}$, $C_o = 0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	V_o	$T_j = 25^\circ\text{C}$	-8.64	-9.0	-9.36	V
		$-12\text{V} \leq V_i \leq -24\text{V}$, $I_o = 1\text{mA} \sim 40\text{mA}$	-8.55	-9.0	-9.45	V
		$I_o = 1\text{mA} \sim 70\text{mA}$	-8.55	-9.0	-9.45	V (note)
Load Regulation	ΔV_o	$T_j = 25^\circ\text{C}$, $I_o = 1\text{mA} \sim 100\text{mA}$		19	90	mV
		$T_j = 25^\circ\text{C}$, $I_o = 1\text{mA} \sim 40\text{mA}$		11	40	mV
Line regulation	ΔV_o	$-12\text{V} \leq V_i \leq -24\text{V}$, $T_j = 25^\circ\text{C}$		45	175	mV
		$-13\text{V} \leq V_i \leq -24\text{V}$, $T_j = 25^\circ\text{C}$		40	125	mV
Quiescent Current	I_q			4.1	6.0	mA
Quiescent Current Change	ΔI_q	$-13\text{V} \leq V_i \leq -24\text{V}$			1.5	mA
	ΔI_q	$1\text{mA} \leq V_i \leq 40\text{mA}$			0.1	mA
Output Noise Voltage	V_n	$10\text{Hz} \leq f \leq 100\text{KHz}$		58		μV
Ripple Rejection	RR	$-15\text{V} \leq V_i \leq -24\text{V}$, $f = 120\text{Hz}$, $T_j = 25^\circ\text{C}$		45		dB
Dropout Voltage	V_d	$T_j = 25^\circ\text{C}$		1.7		V

TYPICAL APPLICATION

