



TO-92 Plastic-Encapsulate Transistors

79L09

CJ79L09 Three-terminal positive voltage regulator

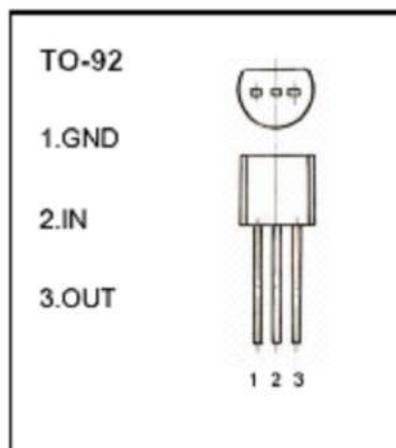
FEATURES

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
		$-12\text{V}\leq V_i\leq -24\text{V}$, $I_o=1\text{mA}-40\text{mA}$	-8.55	-9.0	-9.45	V
		$I_o=1\text{mA}-70\text{mA}$	-8.55	-9.0	-9.45	V (note)
Load Regulation	ΔV_o	$T_j=25^\circ\text{C}$, $I_o=1\text{mA}-100\text{mA}$		19	90	mV
		$T_j=25^\circ\text{C}$, $I_o=1\text{mA}-40\text{mA}$		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
		$1\text{mA}\leq V_i\leq 40\text{mA}$			0.1	mA
Output Noise Voltage	V_w	$10\text{Hz}\leq f\leq 100\text{KHz}$		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

