

## TO-92 Plastic-Encapsulate Transistors

# 79L09

**CJ79L09** Three-terminal positive voltage regulator

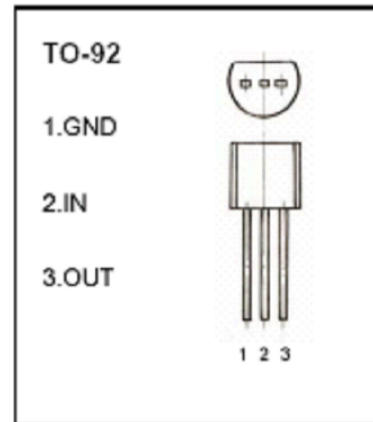
### FEATURES

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( $V_i=-16\text{V}, I_o=40\text{mA}, 0^\circ\text{C}<T_j<125^\circ\text{C}, C_1=0.33\mu\text{F}, C_o=0.1\mu\text{F}$ , 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	$\Delta V_o$	$T_j=25^\circ\text{C}, I_o=1\text{mA}-100\text{mA}$		19	90	mV
		$T_j=25^\circ\text{C}, I_o=1\text{mA}-40\text{mA}$		11	40	mV
Line regulation	$\Delta V_o$	$-12\text{V}\leq V_i\leq -24\text{V}, T_j=25^\circ\text{C}$		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	$\Delta I_q$	$-13\text{V}\leq V_i\leq -24\text{V}$			1.5	mA
	$\Delta I_q$	$1\text{mA}\leq V_i\leq 40\text{mA}$			0.1	mA
Output Noise Voltage	$V_{ni}$	10Hz≤f≤100KHz		58		uV
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

