



**TO-92 Encapsulate Three-terminal Voltage Regulator**

**CJ79L15** Three-terminal positive voltage regulator

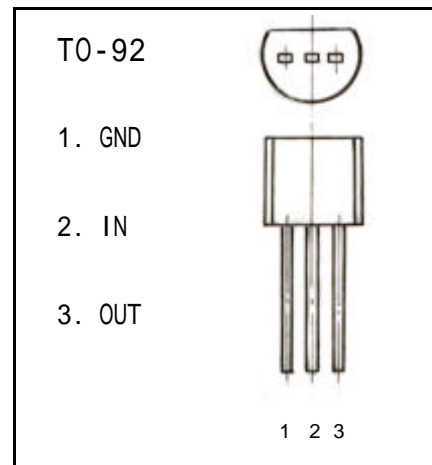
**FEATURES**

Maximum Output current

$I_{OM}$ : 100 mA

Output voltage

$V_O$ : -15 V



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

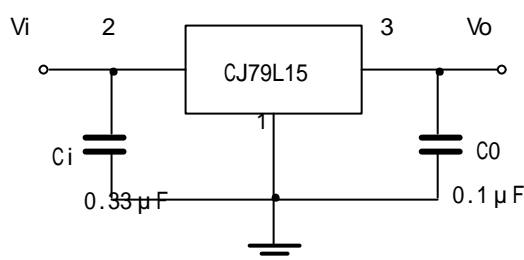
Parameter	Symbol	Value	Units
Input Voltage	$V_i$	-35	V
Operating Junction Temperature Range	$T_{OPR}$	-20+120	
Storage Temperature Range	$T_{STG}$	-55+150	

**ELECTRICAL CHARACTERISTICS**

( $V_i = -23V, I_o = 40mA, 0 < T_j < 125$ ,  $C_1 = 0.33 \mu F, C_o = 0.1 \mu F$ , unless otherwise specified )

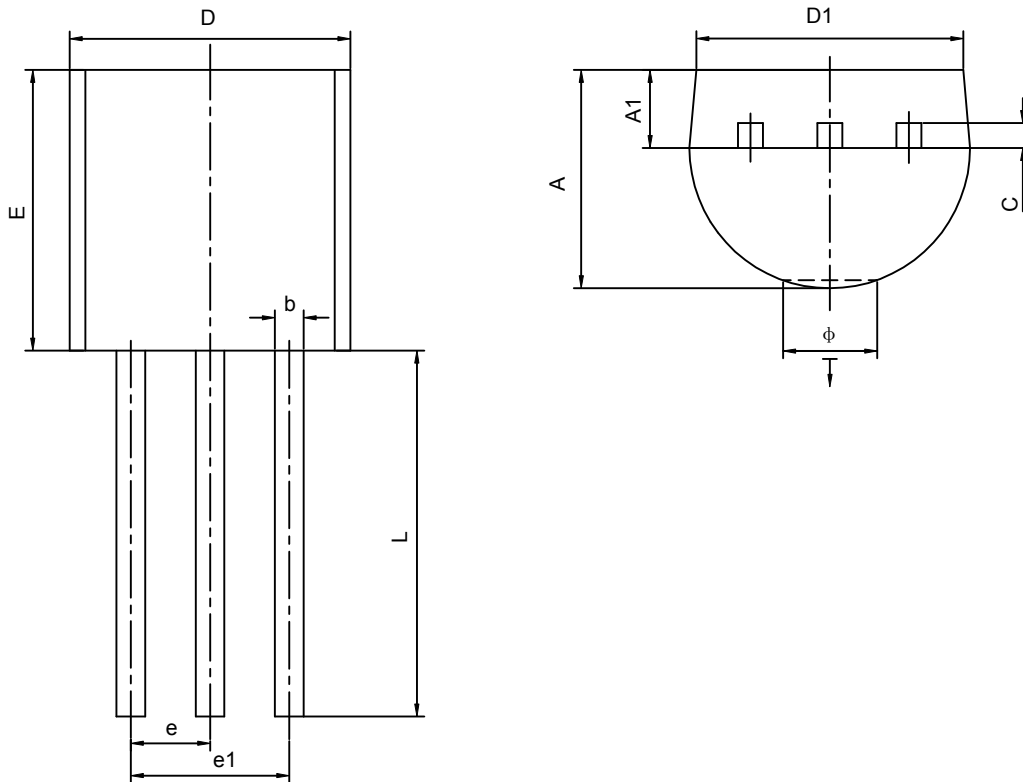
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	$V_o$	$T_j = 25$	-14.4	-15	-15.6	V
		-17.5V $V_i$ -30V, $I_o = 1mA-40mA$	-14.25	-15	-15.75	V
		$V_i = -23V, I_o = 1mA-70mA$	-14.25	-15	-15.75	(note)
Load Regulation	$V_o$	$T_j = 25$ , $I_o = 1mA-100mA, V_i = -23V$		25	150	mV
		$T_j = 25$ , $I_o = 1mA-40mA, V_i = -23V$		15	75	mV
Line regulation	$V_o$	-17.5V $V_i$ -30V, $T_j = 25$ , $I_o = 40mA$		65	300	mV
		-19V $V_i$ -30V, $T_j = 25$ , $I_o = 40mA$		5	250	mV
Quiescent Current	$I_q$	$T_j = 25$			6.5	mA
Quiescent Current Change	$I_q$	-19V $V_i$ -30V, $I_o = 40mA$			1.5	mA
	$I_q$	1mA $I_o$ 40mA, $V_i = -23V$			0.1	mA
Output Noise Voltage	$V_N$	10Hz $f$ 100KHz		90		$\mu V$
Ripple Rejection	RR	-18.5V $V_i$ -28.5V, $f = 120Hz, 25$ $T_j$ 125	34	39		dB
Dropout Voltage	$V_d$	$T_j = 25$		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.

## TO-92 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.400	4.700	0.173	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270TYP		0.050TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Ö		1.600		0.063
↓	0.000	0.380	0.000	0.015