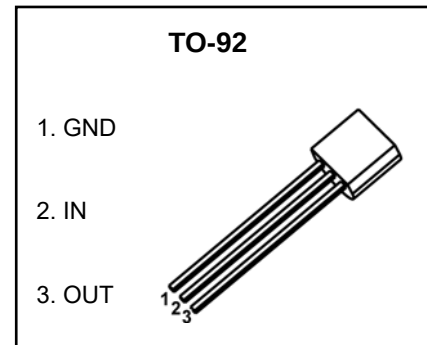


TO-92 Plastic-Encapsulate Voltage Regulator

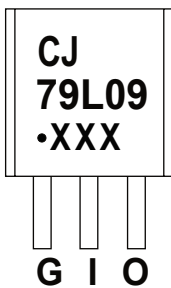
CJ79L09 Three-terminal negative voltage regulator

FEATURES

- Maximum output current
 I_{OM} : 0.1A
- Output voltage
 V_o : -9 V
- Continuous total dissipation
 P_D : 0.625 W ($T_a = 25\text{ }^{\circ}\text{C}$)



MARKING



CJ79L09=Device code
Solid dot=Green molding compound device,
if none, the normal device
XXX=Code

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
CJ79L09	TO-92	Bulk	1000pcs/Bag
CJ79L09-TA	TO-92	Tape	2000pcs/Box

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

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-30	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	200	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T_{OPR}	-40~+125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

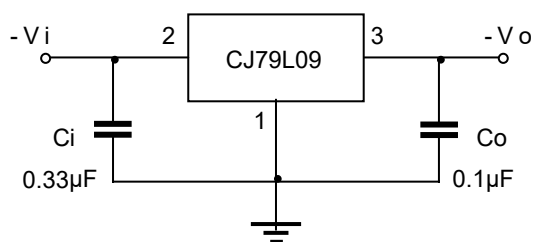
$T_a=25^{\circ}\text{C}$ unless otherwise specified

($V_i=-16\text{V}$, $I_o=40\text{mA}$, $C_i=0.33\mu\text{F}$, $C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$T_J=25^{\circ}\text{C}$	-8.73	-9.0	-9.27	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
Load Regulation	ΔV_o	$I_o=1\text{mA}-100\text{mA}$, $T_J=25^{\circ}\text{C}$		19	90	mV
		$I_o=1\text{mA}-40\text{mA}$, $T_J=25^{\circ}\text{C}$		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	$T_J=25^{\circ}\text{C}$		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	$10\text{Hz}\leq f\leq 100\text{KHz}$, $T_J=25^{\circ}\text{C}$		58		$\mu\text{V}/V_o$
Ripple Rejection	RR	$-15\text{V}\leq V_i\leq -24\text{V}$, $f=120\text{Hz}$		45		dB
Dropout Voltage	V_d	$T_J=25^{\circ}\text{C}$		1.7		V

* Pulse test.

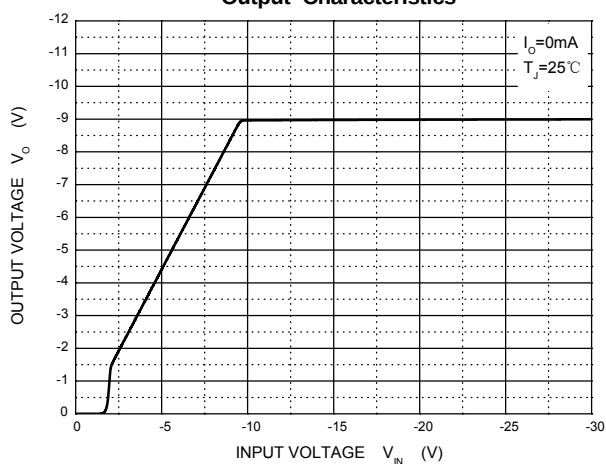
TYPICAL APPLICATION



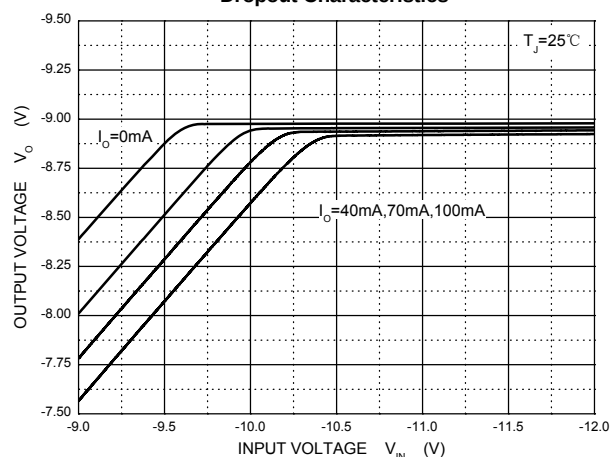
Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators

Typical Characteristics

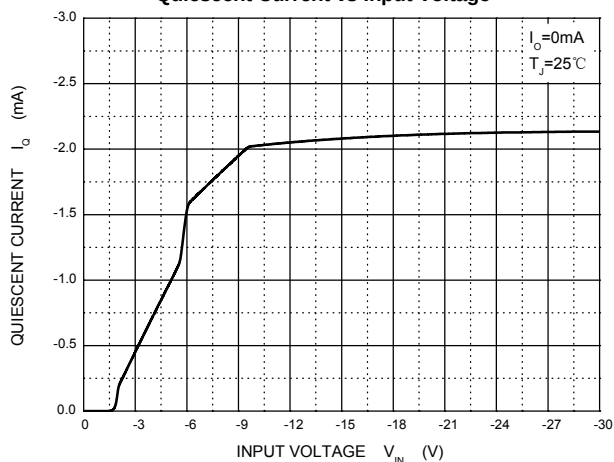
Output Characteristics



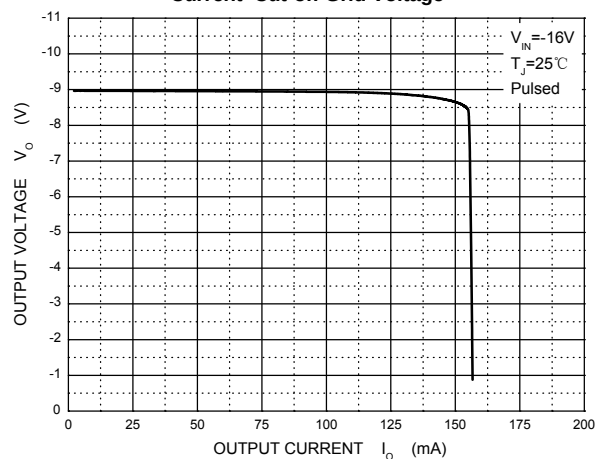
Dropout Characteristics



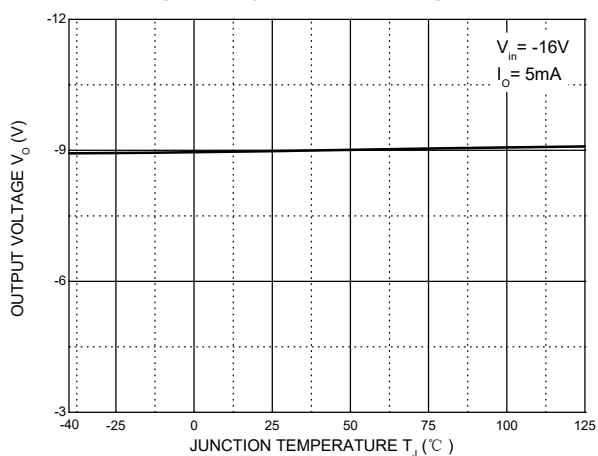
Quiescent Current vs Input Voltage



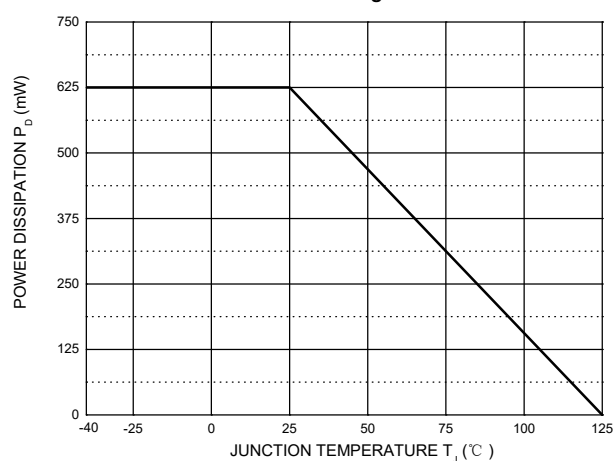
Current Cut-off Grid Voltage



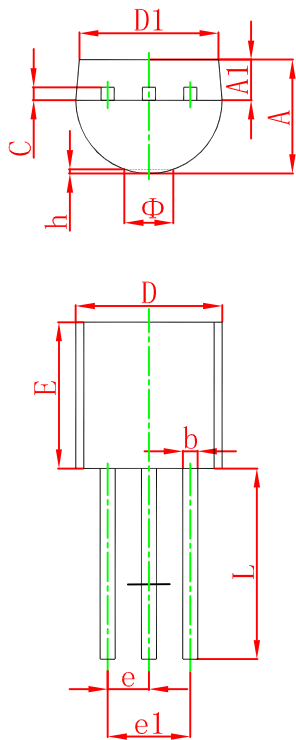
Output Voltage vs Junction Temperature



Power Derating Curve

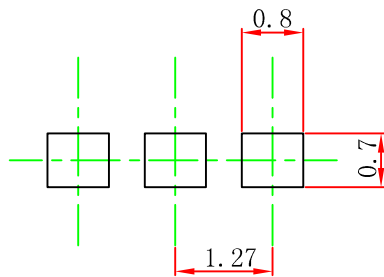


TO-92 Package Outline Dimensions



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	1.270 TYP		0.050 TYP	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

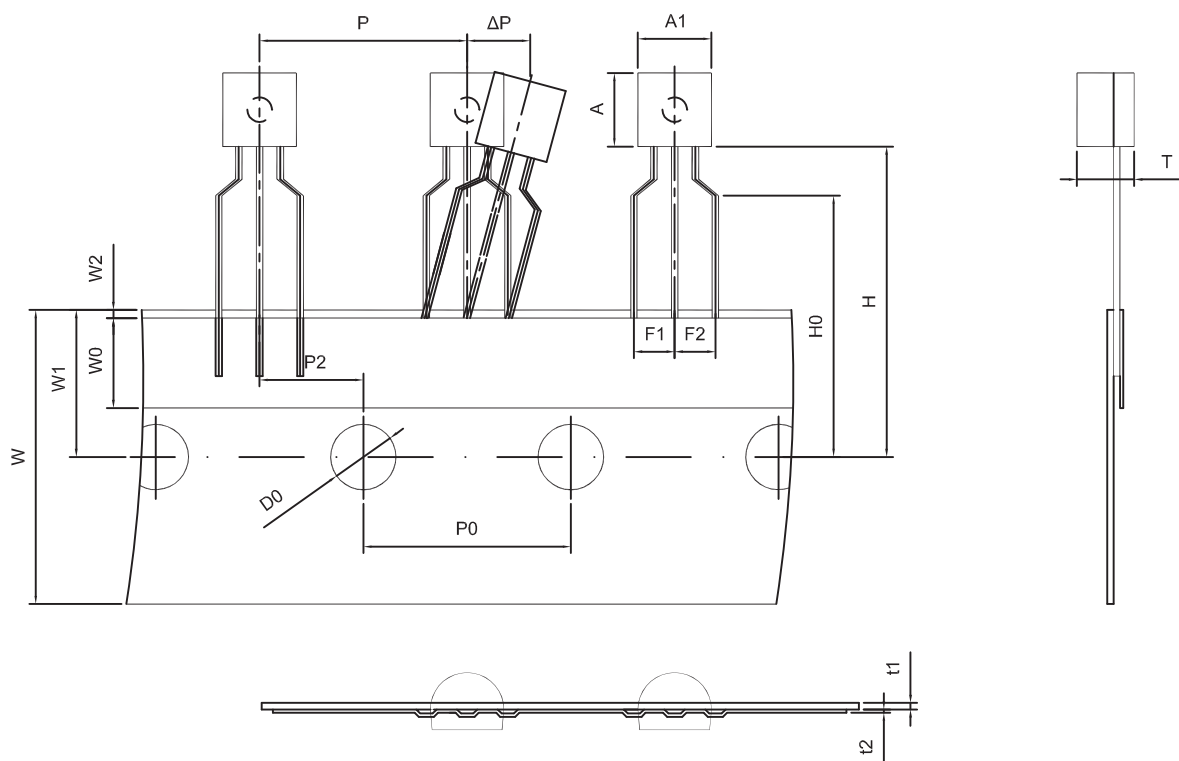
TO-92 Suggested Pad Layout



- Note:
- 1. Controlling dimension: in millimeters.
 - 2. General tolerance: $\pm 0.05\text{mm}$.
 - 3. The pad layout is for reference purposes only.

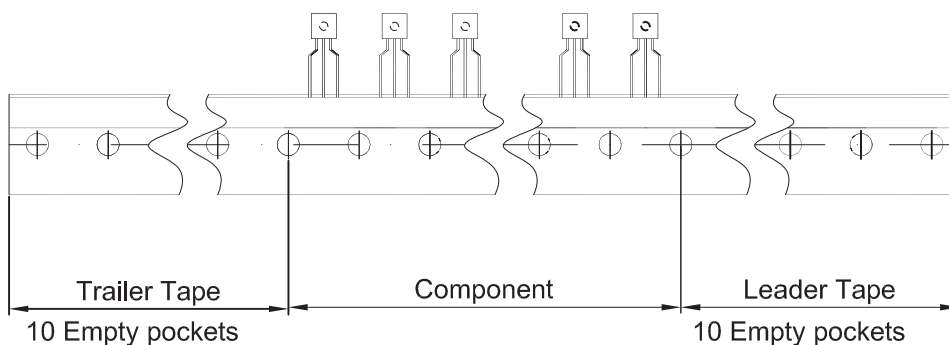
TO-92 PACKAGE TAPEING DIMENSION

TO-92 PACKAGE TAPEING DIMENSION



Dimiensions are in millimeter

A1	A	T	P	P0	P2	F1	F2	W
4.5	4.5	3.5	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0 MAX.	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	2000 pcs	333×162×43	20,000 pcs	350×340×250

DISCLAIMER

IMPORTANT NOTICE, PLEASE READ CAREFULLY

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