

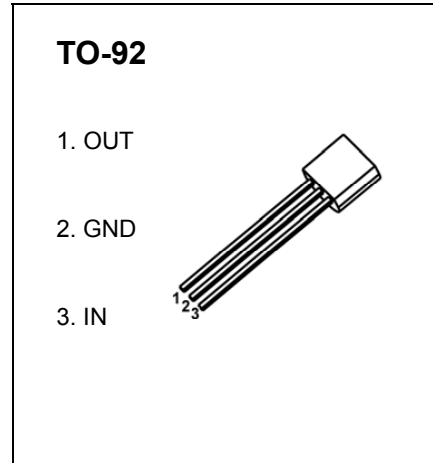


**TO-92 Encapsulate Three-terminal Voltage Regulators**

**CJ78L08** Three-terminal positive voltage regulator

**FEATURES**

- Maximum Output current  
 $I_{OM}$ : 0.1 A
- Output voltage  
 $V_o$ : 8 V
- Continuous total dissipation  
 $P_D$ : 0.625W



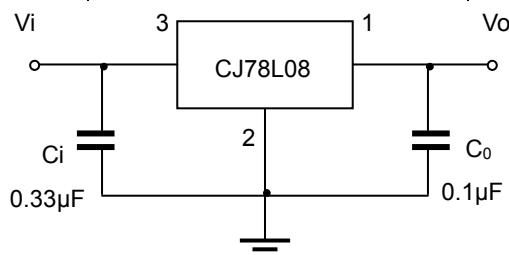
**ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)**

| Parameter                            | Symbol    | Value    | Units |
|--------------------------------------|-----------|----------|-------|
| Input Voltage                        | $V_I$     | 30       | V     |
| Operating Junction Temperature Range | $T_{OPR}$ | 0~+150   | °C    |
| Storage Temperature Range            | $T_{STG}$ | -55~+150 | °C    |

**ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ( $V_i=14V, I_o=40mA, C_i=0.33\mu F, C_o=0.1\mu F$ , unless otherwise specified )**

| Parameter                | Symbol       | Test conditions                                     | Min | Typ | Max | Unit    |
|--------------------------|--------------|---|-----|-----|-----|---------|
| Output voltage           | $V_o$        | $25^\circ C$  | 7.7 | 8.0 | 8.3 | V       |
|                          |              | $10.5V \leq V_i \leq 23V, I_o=1mA \sim 40mA$        | 7.6 | 8.0 | 8.4 | V       |
|                          |              | $0-125^\circ C$<br>$I_o=1mA \sim 70mA$              | 7.6 | 8.0 | 8.4 | V       |
| Load Regulation          | $\Delta V_o$ | $I_o=1mA \sim 100mA$<br>$25^\circ C$                |     | 18  | 80  | mV      |
|                          |              | $I_o=1mA \sim 40mA$<br>$25^\circ C$                 |     | 10  | 40  | mV      |
| Line regulation          | $\Delta V_o$ | $10.5V \leq V_i \leq 23V$<br>$25^\circ C$           |     | 42  | 175 | mV      |
|                          |              | $11V \leq V_i \leq 23V$<br>$25^\circ C$             |     | 36  | 125 | mV      |
| Quiescent Current        | $I_q$        | $25^\circ C$  |     | 4   | 6   | mA      |
| Quiescent Current Change | $\Delta I_q$ | $11V \leq V_i \leq 23V$<br>$0-125^\circ C$          |     |     | 1.5 | mA      |
|                          | $\Delta I_q$ | $1mA \leq I_o \leq 40mA$<br>$0-125^\circ C$         |     |     | 0.1 | mA      |
| Output Noise Voltage     | $V_N$        | $10Hz \leq f \leq 100KHz$<br>$25^\circ C$           |     | 54  |     | $\mu V$ |
| Ripple Rejection         | RR           | $13V \leq V_i \leq 23V, f=120Hz$<br>$0-125^\circ C$ | 37  | 46  |     | dB      |
| Dropout Voltage          | $V_d$        | $25^\circ C$  |     | 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.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Linear Voltage Regulators](#) category:*

*Click to view products by [Changjiang](#) manufacturer:*

Other Similar products are found below :

[LV56831P-E](#) [LV5684PVD-XH](#) [MCDTSA6-2R](#) [L7815ACV-DG](#) [PQ3DZ53U](#) [LV56801P-E](#) [TLE42794G](#) [L78L05CZ/1SX](#) [L78LR05DL-MA-E](#) [636416C](#) [714954EB](#) [BA033LBSG2-TR](#) [LV5680P-E](#) [L78M15CV-DG](#) [TLS202B1MBV33HTSA1](#) [L79M05T-E](#) [TLS202A1MBVHTSA1](#) [L78LR05D-MA-E](#) [NCV317MBTG](#) [NTE7227](#) [LV5680NPVC-XH](#) [LT1054CN8](#) [MP2018GZD-5-Z](#) [MP2018GZD-33-Z](#) [MIC5281-3.3YMM](#) [RT9078-28GQZ](#) [MC78L06BP-AP](#) [TA48LS05F\(TE85L,F\)](#) [TC47BR5003ECT](#) [TCR2LN12,LF\(S](#) [TCR2LN28,LF\(S](#) [TCR2LN30,LF\(S](#) [TCR3DF295,LM\(CT](#) [TCR3DF40,LM\(CT](#) [BA178M20CP-E2](#) [L78M12ABDT](#) [LR645N3-G-P003](#) [LR645N3-G-P013](#) [ZXTR2005P5-13](#) [SCD7812BTG](#) [TCR3DF335,LM\(CT](#) [TLE42994E V33](#) [ZXTR2008K-13](#) [ZXTR2005K-13](#) [L88R05DL-E](#) [ADP3300ARTZ-2.7RL7](#) [LM120K-15/883](#) [IFX54441LDVXUMA1](#) [LM317D2T-TR](#) [LM350T/NOPB](#)