

## NTE1936 Integrated Circuit Positive Voltage Regulator, 12V, 2A

**Features:**

- 3 Pin Plastic Package TO3P
- Only Output Capacitor is Externally Required
- Precise Setting Voltage of  $\pm 2\%$
- Wide Input Voltage Range ( $\sim 45V$ )
- Built-in Current Foldback Protection
- Ideal Combination of Passivated Power Transistor and High Reliability Flip-Chip Circuit

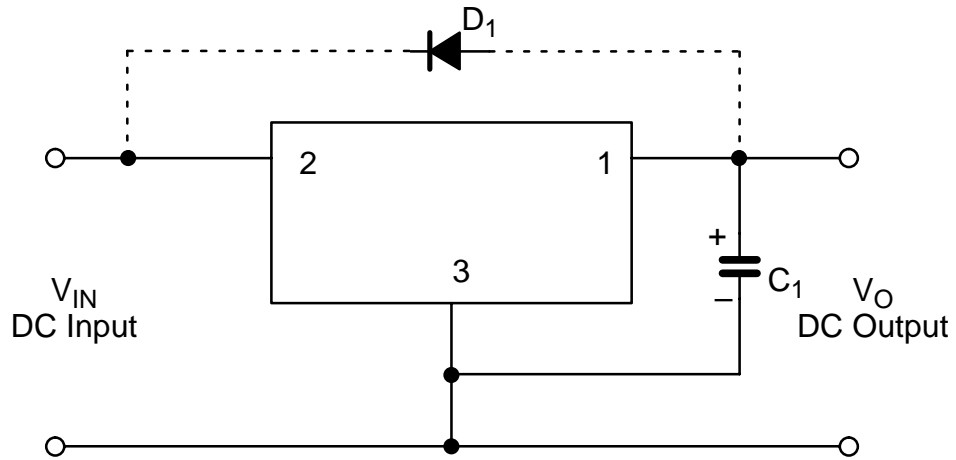
**Absolute Maximum Ratings:** ( $T_A = +25^\circ C$  unless otherwise specified)

|  |                               |
|--|-------------------------------|
| DC Input Voltage, $V_{IN}$ .....                       | 45V                           |
| Power Dissipation, $P_C$ ( $T_C = +25^\circ C$ ) ..... | 50W                           |
| (No Fin) .....   | 2W                            |
| Thermal Resistance, Junction-to-Case, $R_{thJC}$ ..... | $2^\circ C/W$                 |
| Junction Temperature Range, $T_j$ .....                | $-30^\circ$ to $+125^\circ C$ |
| Operating Ambient Temperature Range, $T_{op}$ .....    | $-20^\circ$ to $+80^\circ C$  |
| Storage Temperature Range, $T_{stg}$ .....             | $-30^\circ$ to $+125^\circ C$ |

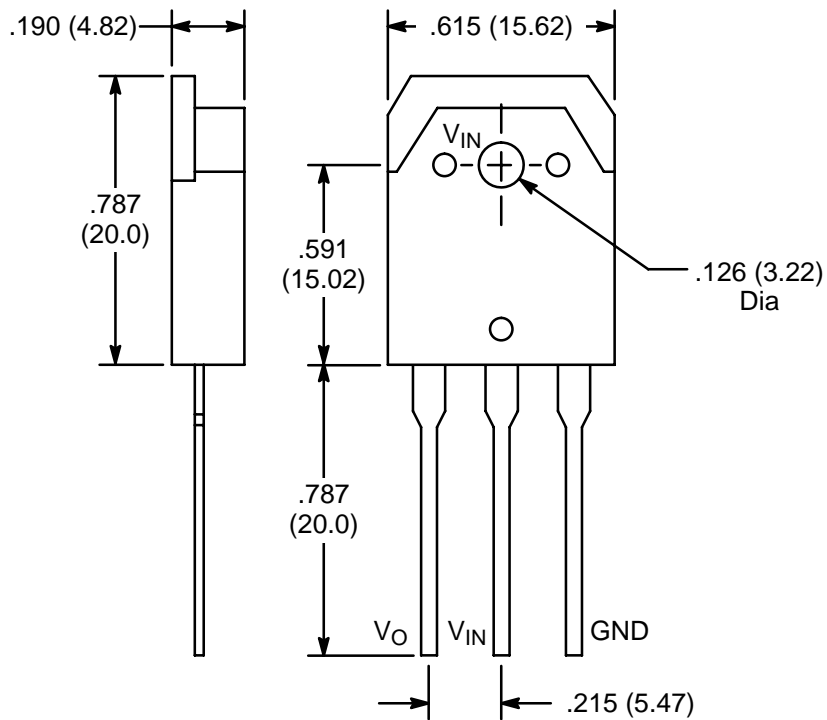
**Electrical Characteristics:** ( $T_A = +25^\circ C$  unless otherwise specified)

| Parameter               | Symbol            | Test Conditions                     | Min  | Typ       | Max  | Unit           |
|-------------------------|-------------------|-------------------------------------|------|-----------|------|----------------|
| DC Input Voltage        | $V_{IN}$          | $I_O = 2A$                          | 15   | –         | 35   | V              |
| Output Voltage          | $V_O$             | $V_{IN} = 19V, I_O = 0.5A$          | 11.8 | 12.0      | 12.2 | V              |
| Output Current          | $I_O$             |                                     | 0    | –         | 2    | A              |
| Line Regulation         | $\Delta V_{LINE}$ | $V_{IN} = 16V$ to $22V, I_O = 0.5A$ | –    | 10        | 30   | mV             |
| Load Regulation         | $\Delta V_{LOAD}$ | $V_{IN} = 19V, I_O = 0$ to $2A$     | –    | 80        | 200  | mV             |
| Temperature Coefficient | $K_t$             |                                     | –    | $\pm 1.5$ | –    | mV/ $^\circ C$ |
| Ripple Rejection        |                   | 100 to 120Hz                        | –    | 60        | –    | dB             |
| Foldback Current        | $I_{S1}$          |                                     | 2.4  | –         | –    | A              |
| Short-Circuit Current   | $I_{S2}$          |                                     | –    | –         | 0.6  | A              |

### External Circuit



- Note 1. Output capacitor  $C_1$  (47 to 100 $\mu$ f) shall be connected directly to output terminal (Pin1) and GND terminal (Pin3) as shown above.
- Note 2. When wiring between the regulator and the load is long, another capacitor (47 to 100 $\mu$ f) shall be added in parallel with the load.
- Note 3. If there is a possibility of reverse biasing between input and output, a protection diode ( $D_1$ ) is to be added. The recommended diode for  $D_1$  is NTE116.



## 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 [NTE manufacturer](#):*

Other Similar products are found below :

[LV56831P-E](#) [LV5684PVD-XH](#) [MAX202ECWE-LF](#) [MCDTSA6-2R](#) [L4953G](#) [L7815ACV-DG](#) [PQ3DZ53U](#) [LV56801P-E](#)  
[TCR3DF13,LM\(CT](#) [TCR3DF39,LM\(CT](#) [TLE42794G](#) [L78L05CZ/1SX](#) [L78LR05DL-MA-E](#) [L78MR05-E](#) [033150D](#) [033151B](#) [090756R](#)  
[636416C](#) [NCV78M15BDTG](#) [702482B](#) [714954EB](#) [TLE42794GM](#) [TLE42994GM](#) [ZMR500QFTA](#) [BA033LBSG2-TR](#)  
[NCV78M05ABDTRKG](#) [NCV78M08BDTRKG](#) [NCP7808TG](#) [NCV571SN12T1G](#) [LV5680P-E](#) [CAJ24C256YI-GT3](#) [L78M15CV-DG](#) [L9474N](#)  
[TLS202B1MBV33HTSA1](#) [L79M05T-E](#) [NCP571SN09T1G](#) [MAX15006AASA/V+](#) [MIC5283-5.0YML-T5](#) [L4969URTR-E](#) [L78LR05D-MA-E](#)  
[NCV7808BDTRKG](#) [L9466N](#) [NCP7805ETG](#) [SC7812CTG](#) [NCV7809BTG](#) [NCV571SN09T1G](#) [NCV317MBTG](#) [MC78M15CDTT5G](#)  
[MC78M12CDTT5G](#) [L9468N](#)