



**ELECTRONICS, INC.**  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089

## NTE1902 Integrated Circuit 3 Terminal Positive Voltage Regulator 9V, 100mA

**Features:**

- Output Current up to 100mA
- No External Components
- Internal Thermal Overload Protection
- Internal Short-Circuit Current Limiting
- Output Voltage Tolerances of  $\pm 5\%$  over the Temperature Range

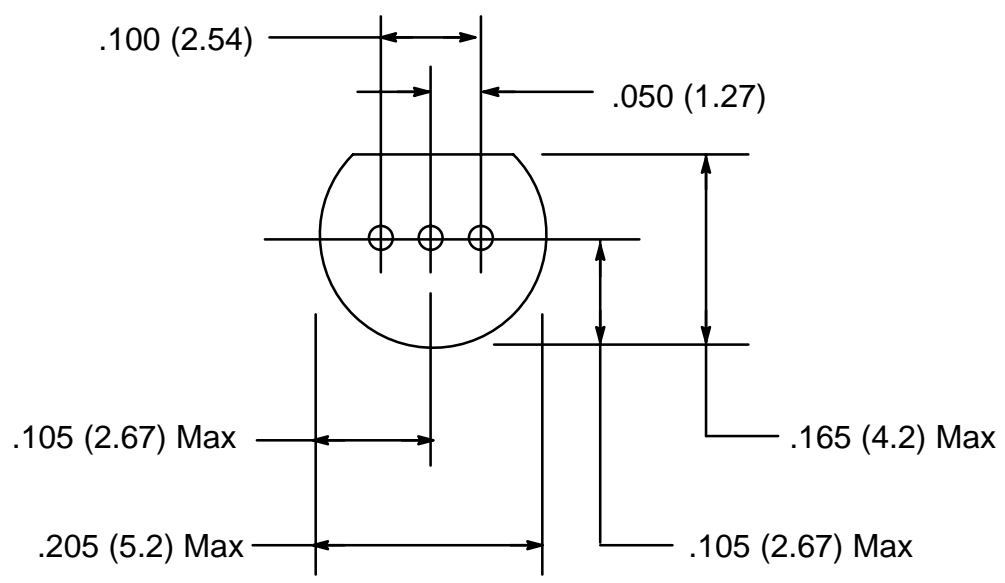
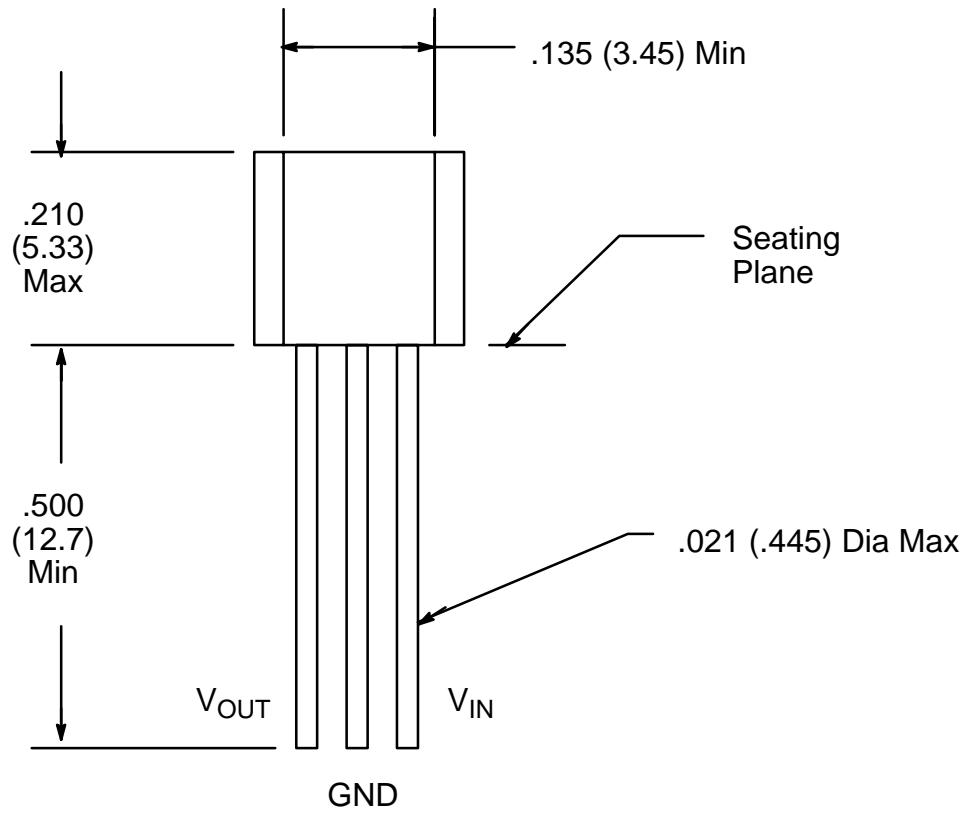
**Absolute Maximum Ratings:**

Input Voltage,  $V_{IN}$  ..... 35V  
 Internal Power Dissipation,  $P_D$  ..... Internally Limited  
 Operating Junction Temperature Range,  $T_J$  .....  $0^\circ$  to  $+125^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-55^\circ$  to  $+150^\circ\text{C}$   
 Lead Temperature (During Soldering, 10sec),  $T_L$  .....  $+260^\circ\text{C}$

**Electrical Characteristics:** ( $V_{OUT} = 9V$ ,  $V_{IN} = 15V$ ,  $0^\circ \leq T_J \leq +125^\circ\text{C}$ ,  $I_O = 40\text{mA}$ ,  $C_{IN} = 0.33\mu\text{F}$ ,  $C_{OUT} = 0.1\mu\text{F}$ , Note 1 unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit	
Output Voltage	$V_O$	$T_J = +25^\circ\text{C}$	8.64	9.00	9.36	V	
		$1\text{mA} \leq I_O \leq 70\text{mA}$ , $11.5\text{V} \leq V_{IN} \leq 24\text{V}$	8.55	9.00	9.45	V	
Line Regulation	$\text{Reg}_{Line}$	$T_J = +25^\circ\text{C}$	$11.5\text{V} \leq V_{IN} \leq 24\text{V}$	–	90	200	mV
			$13\text{V} \leq V_{IN} \leq 24\text{V}$	–	100	150	mV
Load Regulation	$\text{Reg}_{Load}$	$T_J = +25^\circ\text{C}$	$1\text{mA} \leq I_O \leq 100\text{mA}$	–	20	90	mV
			$1\text{mA} \leq I_O \leq 40\text{mA}$	–	10	45	mV
Quiescent Current	$I_B$		–	2.1	5.5	mA	
Quiescent Current Change	$I_B$	With line, $11.5\text{V} \leq V_{IN} \leq 24\text{V}$	–	–	1.5	mA	
		With load, $1\text{mA} \leq I_O \leq 40\text{mA}$	–	–	0.1	mA	
Output Noise Voltage	$V_N$	$T_A = +25^\circ\text{C}$ , $f = 10\text{Hz}$ to $10\text{kHz}$	–	70	–	$\mu\text{V}$	
Temperature Coefficient of $V_{OUT}$		$I_{OUT} = 5\text{mA}$	–	–0.9	–	$\text{mV}/^\circ\text{C}$	
Ripple Rejection	RR	$T_J = +25^\circ\text{C}$ , $15\text{V} \leq V_{IN} \leq 25\text{V}$ , $f = 120\text{Hz}$	38	44	–	dB	
Dropout Voltage	$V_{DO}$	$T_J = +25^\circ\text{C}$	–	1.4	–	V	
Peak Output/Short Circuit Current	$I_{pk}/I_{OS}$	$T_J = +25^\circ\text{C}$	–	140	–	mA	

Note 1. The maximum steady state usable output current and input voltage are very dependent on the heat sink and/or lead length of the package. The data above represents pulse test conditions with junction temperatures as indicated at the initiation of the test.



## 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](#)