



ELECTRONICS, INC.
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NTE1934X Integrated Circuit Positive Voltage Regulator, 5V, 2A

Features:

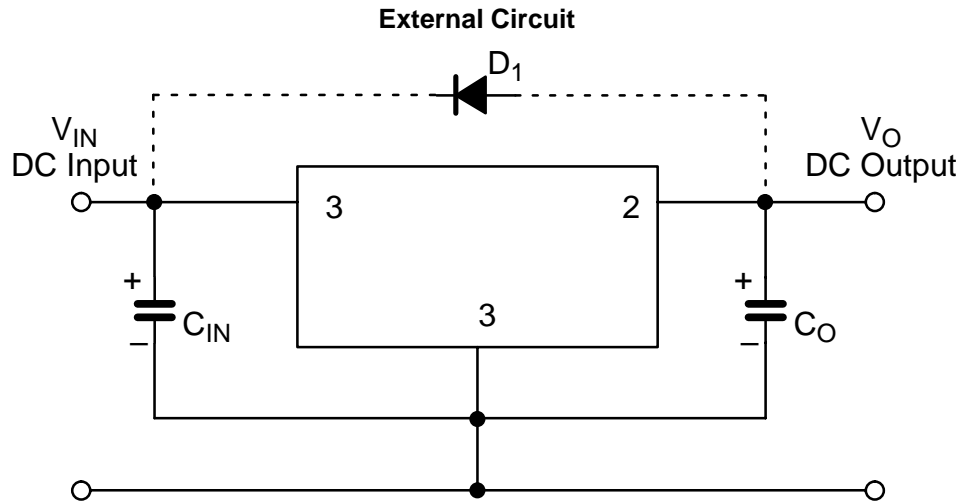
- 3 Pin Plastic Package TO3P
- Only Output Capacitor is Externally Required
- Precise Setting Voltage of $\pm 2\%$
- Wide Input Voltage Range
- Built-in Current Foldback Protection
- Ideal Combination of Passivated Power Transistor and High Reliability Flip-Chip Circuit

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

DC Input Voltage, V_{IN}	25V
Power Dissipation, P_C ($T_C = +25^\circ\text{C}$)	50W
(No Fin)	1.6W
Thermal Resistance, Junction-to-Case, R_{thJC}	2°C/W
Junction Temperature Range, T_J	-30° to $+125^\circ\text{C}$
Operating Ambient Temperature Range, T_{op}	-20° to $+100^\circ\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+125^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
DC Input Voltage	V_{IN}	$I_O = 2A$	6	–	15	V
Output Voltage	V_O	$V_{IN} = 8V, I_O = 1A$	4.9	5.0	5.1	V
Output Current	I_O		0	–	2	A
Line Regulation	ΔV_{LINE}	$V_{IN} = 6V$ to $15V, I_O = 1A$	–	10	30	mV
Load Regulation	ΔV_{LOAD}	$V_{IN} = 8V, I_O = 0$ to $2A$	–	40	100	mV
Temperature Coefficient	K_t		–	± 0.5	–	mV/ $^\circ\text{C}$
Ripple Rejection	RR	$f = 100\text{Hz}$ to 120Hz	–	54	–	dB
Foldback Current	I_{S1}	$V_{IN} = 8V$	2.4	–	–	A



Note 1. C_O : Output capacitor (47 to 100 μ F, 50V)

Note 2. C_{IN} : Capacitor for oscillation protection (approx. 0.33 μ F), if needed.

Note 3. Diode for reverse bias protection (NTE552) if needed.

