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## NTE1934X Integrated Circuit Positive Voltage Regulator, 5V, 2A

**Features:**

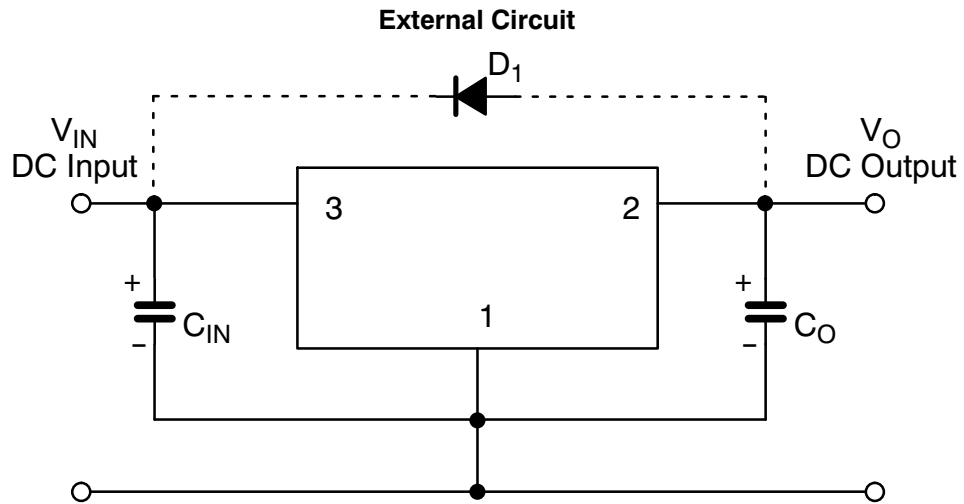
- 3 Pin Plastic Package TO3P
- Only Output Capacitor is Externally Required
- Precise Setting Voltage of  $\pm 2\%$
- Wide Input Voltage Range
- Built-in Current Foldback Protection
- Ideal Combination of Passivated Power Transistor and High Reliability Flip-Chip Circuit

**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, $R_{thJC}$ .....	$2^\circ\text{C/W}$
Junction Temperature Range, $T_J$ .....	$-30^\circ$ to $+125^\circ\text{C}$
Operating Ambient Temperature Range, $T_{op}$ .....	$-20^\circ$ to $+100^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-30^\circ$ 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	$\Delta V_{LINE}$	$V_{IN} = 6V$ to $15V, I_O = 1A$	-	10	30	mV
Load Regulation	$\Delta V_{LOAD}$	$V_{IN} = 8V, I_O = 0$ to $2A$	-	40	100	mV
Temperature Coefficient	$K_t$		-	$\pm 0.5$	-	mV/ $^\circ\text{C}$
Ripple Rejection	RR	$f = 100\text{Hz}$ to $120\text{Hz}$	-	54	-	dB
Foldback Current	$I_{S1}$	$V_{IN} = 8V$	2.4	-	-	A



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

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

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

