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

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

Features:

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

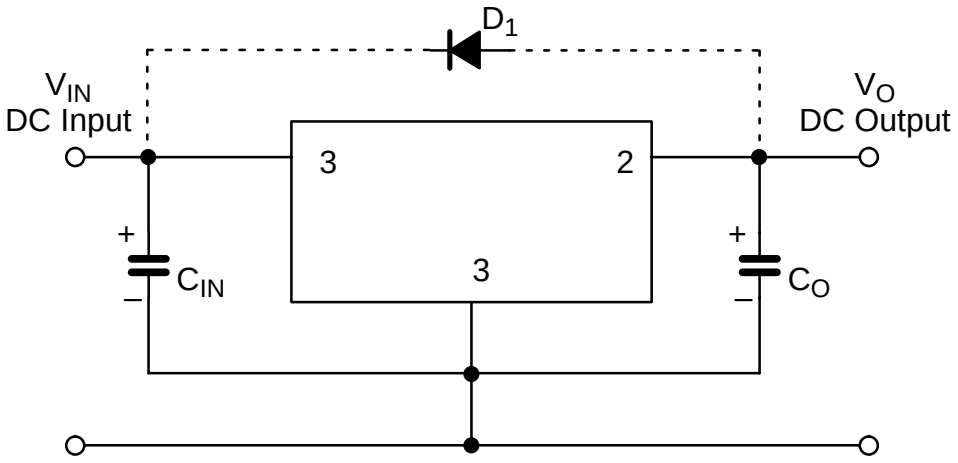
Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

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

Electrical Characteristics: (T_A = +25°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/°C
Ripple Rejection	RR	f = 100Hz to 120H_Z	–	54	–	dB
Foldback Current	I_{S1}	V_{IN} = 8V	2.4	–	–	A

External Circuit



Note 1. C_O: Output capacitor (47 to 100μF, 50V)
Note 2. C_{IN}: Capacitor for oscillation protection (approx. 0.33μF), if needed.
Note 3. Diode for reverse bias protection (NTE552) if needed.

