



ELECTRONICS, INC.
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NTE1867 & NTE1868 Integrated Circuit Hybrid Switching Voltage Regulator

Features:

- Few External Components Needed
- Conversion Efficiency: 85%
- Accurate Voltage Setting: $\pm 2\%$
- Low Switching Noise
- Output Voltage Adjustable

Applications:

- Power Supply Circuits for Electronic Typewriter, Printer, and Copy Machines
- Power Supply for VCR, Personal Wireless Station, and Battery Charger

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

DC Input Voltage, V_{IN}	45V
DC Input Current, I_O	
Continuous	2A
Pulsed	3A
Power Dissipation, P_D	
$T_C = +25^\circ\text{C}$	75W
$T_C = +100^\circ\text{C}$	15W
Operating Temperature Range, T_{opr}	-20° to $+100^\circ\text{C}$
Storage Temperature Range, T_{stg}	-20° to $+100^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
DC Input Voltage Range NTE1867	V_{IN}	$I_O = 1A$	18	–	–	V
			NTE1868	19	–	–
Output Voltage Setting NTE1867	V_O	$V_{IN} = 24V, I_O = 1A$	11.8	12.0	12.2	V
			NTE1868	12.8	13.0	13.2
Line Regulation	ΔV_{LINE}	$V_{IN} = 20V$ to $28V, I_O = 1A$	–	–	60	mV
Load Regulation	ΔV_{LOAD}	$V_{IN} = 24V, I_O = 0.5A$ to $1.5A$	–	–	100	mV
Efficiency	η	$V_{IN} = 24V, I_O = 1A$	–	85	–	%
Ripple Rejection	R_{REJ}	$f = 100\text{Hz}$ to 200Hz	–	45	–	dB
Oscillating Frequency	f_{OSC}	$V_{IN} = 24V, I_O = 1A$	–	25	–	kHz

Pin Connection Diagram
(Front View)

