

NTE1737 Integrated Circuit Module, Chopper & Chopper Parallel w/2-Output Voltage Regulator

Features:

- 2 Outputs for Microcomputer Power Supply (5V) and Motor Drive Power Supply (24V) and Capable of Delivering 2 Regulated Voltage Outputs from 1 Rectifier
- Independent Overcurrent Protectors for 2 Outputs (Foldback Characteristics)

Applications:

- Serial Printers, Line Printers, Office Automation Equipment
- Floppy Disk Units, Portable VCRs

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

Maximum DC Input Voltage, V_{IN} (DC) max	50V
Maximum Output Current, I_{Omax}	
Average	3A
Peak	
V_{O1}	3.6A
V_{O2}	6.0A
Operating Case Temperature, T_C	$+105^\circ\text{C}$
Junction Temperature, T_J	$+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+105^\circ\text{C}$
Thermal Resistance, Junction-to-Case, R_{thJC}	
V_{O1}	4.7°C/W
V_{O2}	2.7°C/W

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

Parameter	Test Conditions	V_{O1}	V_{O2}	Unit
Output Voltage	Condition 1	5 ± 0.1	24 ± 0.1	V
Ripple Voltage	Condition 1	5	20	mV _{rms} Max
Line Regulation	Condition 2	15	30	mV/V Max
Load Regulation	Condition 3	70	50	mV/V Max
Overcurrent Trip Start Current	Condition 4	3.6	6.0	A Min
Efficiency	Condition 5	80	80	% Typ
Operating Frequency	Condition 1	35	35	kHz Typ
Cutoff Voltage	Condition 1	—	3V or more ON	
		—	1V or less OFF	
Temperature Coefficient	Condition 1	-0.025	-0.01	%/ $^\circ\text{C}$

Test Conditions:

Condition 1: V_{IN} (DC) = 35V, $I_{O1} = I_{O2} = 1A$

Condition 2: V_{IN} (DC) = 30V to 40V, $I_{O1} = I_{O2} = 1A$

Condition 3: V_{IN} (DC) = 35V, $I_{O1} = 1A$ to 3.6A, $I_{O2} = 1A$ to 6A

Condition 4: V_{IN} (DC) = 35V

Condition 5: V_{IN} (DC) = 35V, $I_{O1} = I_{O2} = 1.5A$

Pin Connection Diagram

(Front View)

18	N.C.
17	V_{IN} 1
16	V_{IN} 1
15	V_{IN} 2
14	V_{IN} 2
13	V_Z
12	Sense GND
11	Output 2
10	Output 2
9	GND
8	GND
7	Output 1
6	Output 1
5	V1 Sense 1
4	V1 Sense 2
3	V2 Sense 1
2	V2 Sense 2
1	Cutoff

