

NTE1733 Integrated Circuit Module, 4 Output Positive Voltage Regulator for VCR

Features:

- 4 Outputs
- Output Voltage Select Function

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

Maximum DC Input Voltage, V_{IN} (DC) Max	30V
Maximum Average Output Current, I_O Max	
V_{O1}	2.0A
V_{O2}	1.5A
V_{O3}	1.0A
V_{O4}	0.5A
Maximum Peak Output Current, I_O Max	
V_{O1}	2.5A
V_{O2}	2.0A
V_{O3}	3.0A
Operating Case Temperature, T_C Max	$+105^\circ\text{C}$
Junction Temperature, T_J Max	$+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+105^\circ\text{C}$
Thermal Resistance, Junction-to-Case, R_{thJC}	
V_{O1}, V_{O2}, V_{O3}	4.5°C/W
V_{O4}	10°C/W

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

Parameter	Test Conditions	V_{O1}	V_{O2}	V_{O3}	V_{O4}	Unit
Output Voltage Setting	Condition 1	15.0 ± 0.3	9.5 ± 0.1	12.0 ± 0.1	5.1 ± 0.1	V
Ripple Voltage	Condition 2	5	3	5	3	mV _{p-p} Max
Temperature Coefficient	Condition 1	0.02	0.02	0.02	0.02	%/ $^\circ\text{C}$ Max
Input Regulation	Condition 3	30	35	35	5	mV/V Max
Load Regulation	Condition 4	40	35	35	100	mV/A Max
Minimum Input-Output Voltage Difference	Condition 5	1.5	–	1.2	2.5	V Max

Note 1. When Pin13 is at High Level ($\geq 3\text{V}$), V_{O1} and V_{O2} are turned ON.
When Pin13 is at Low Level ($\leq 0.6\text{V}$), V_{O1} and V_{O2} are turned OFF.

Test Conditions:

Condition 1: V_{IN} (DC) 1 = 20V, V_{IN} (DC) 2 = 15V, I_{O1} = 2A, I_{O2} = I_{O3} = 1A, I_{O4} = 0.5A

Condition 2: V_{IN} (DC) 1 = 20V, V_{IN} (DC) 2 = 15V, I_{O1} = 2A, I_{O2} = I_{O3} = 1A, I_{O4} = 0.5A,
Input Ripple Voltage = $1.5V_{P-P}$

Condition 3: V_{IN} (DC) 1 = $20V \pm 3V$, V_{IN} (DC) 2 = $15.2V \pm 2V$, I_{O1} = 2A, I_{O2} = I_{O3} = 1A, I_{O4} = 0.5A

Condition 4: V_{IN} (DC) 1 = 20V, V_{IN} (DC) 2 = 15V, I_{O1} = I_{O2} = I_{O3} = 0.2A to 2A, I_{O4} = 0 to 0.5A

Condition 5: I_{O1} = 2A, I_{O2} = I_{O3} = 1A, I_{O4} = 0.5A

Pin Connection Diagram

(Front View)

15	Decoupling
14	Decoupling
13	ON/OFF Control
12	GND
11	Reference Input
10	V_O 2 (9.5V @ 1.5A)
9	V_O 1 (15V @ 2A)
8	V_O 1 (15V @ 2A)
7	V_{IN} (DC) 1
6	V_O 3 (12V @ 1A)
5	V_{IN} (DC) 2
4	Decoupling
3	V_O 3 (12V @ 1A)
2	N.C.
1	V_O 4 (5.1V @ 0.5A)

