

NTE1735 Integrated Circuit Module, 3 Output Positive Voltage Regulator for VCR

Features:

- 3 Outputs
- Cutoff Function

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

Maximum DC Input Voltage, V_{IN} (DC) Max

V_{O1}	40V
V_{O2}, V_{O3}, V_{O4}	35V

Maximum Average Output Current, I_O Max

V_{O1}, V_{O2}	1.0A
V_{O3}, V_{O4}	1.5A

Maximum Peak Output Current (0.2sec max), I_O Max

Operating Case Temperature, T_C Max

Junction Temperature, T_J Max

Storage Temperature Range, T_{stg}

Thermal Resistance, Junction-to-Case, R_{thJC}

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, Note 1	16.0 ± 0.3	–	12.0 ± 0.1	11.9 ± 0.1	V
	Condition 1, Note 2	–	12.0 ± 0.3	12.0 ± 0.1	11.9 ± 0.1	V
Ripple Voltage	Condition 2	20	20	5	5	mV _{p-p} Max
Temperature Coefficient	Condition 1	0.02	0.05	0.02	0.02	%/ $^\circ\text{C}$ Max
Input Regulation	Condition 3	35	50	35	35	mV/V Max
Load Regulation	Condition 4	40	100	35	35	mV/A Max
Minimum Input–Output Voltage Difference	Condition 5	2.5	1.2	1.2	1.2	V Max
Minimum Output Current		–	–	–	10	mA Min
V_{O1}/V_{O2} Select	Condition 1, Note 1	ON	–	–	–	
	Condition 1, Note 2	–	ON	–	–	
Output ON	Condition 1, Note 1	V_{O1} or V_{O2}, V_{O3} ON				
	Condition 1, Note 2	V_{O1} or V_{O2}, V_{O3} OFF				
	Condition 1, Note 3	V_{O4} is always ON				

Note 1. Pin11 or Pin13 is at High Level (3V to 15V).

Note 2. Pin11 or Pin13 is at Low Level ($\leq 1.2\text{V}$).

Note 3. Pin11 or Pin13 is at High Level, Pin14 is at Low Level

Test Conditions:

Condition 1: V_{IN} (DC) 1 = 21V, V_{IN} (DC) 2 = 16V, I_{O1} or $I_{O2} = I_{O4} = 0.5A$, $I_{O3} = 0.8A$

Condition 2: V_{IN} (DC) 1 = 21V, V_{IN} (DC) 2 = 16V, I_{O1} or $I_{O2} = I_{O4} = 0.5A$, $I_{O3} = 0.8A$,
Input Ripple Voltage = $1.5V_{P-P}$

Condition 3: V_{IN} (DC) 1 = 19V to 25V, V_{IN} (DC) 2 = 14V to 18V, I_{O1} or $I_{O2} = I_{O4} = 0.5A$, $I_{O3} = 0.8A$

Condition 4: V_{IN} (DC) 1 = 21V, V_{IN} (DC) 2 = 16V, I_{O1} or $I_{O2} = I_{O3} = I_{O4} = 0.2A$ to $2.5A$

Condition 5: I_{O1} or $I_{O2} = I_{O4} = 0.5A$, $I_{O3} = 0.8A$

Pin Connection Diagram

(Front View)

