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## 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, $T_{stg}$	$-30^\circ$ to $+105^\circ\text{C}$
Thermal Resistance, Junction-to-Case, $R_{thJC}$	
$V_{O1}, V_{O2}, V_{O3}$	$4.5^\circ\text{C/W}$
$V_{O4}$	$10^\circ\text{C/W}$

**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	$15.0 \pm 0.3$	$9.5 \pm 0.1$	$12.0 \pm 0.1$	$5.1 \pm 0.1$	V
Ripple Voltage	Condition 2	5	3	5	3	mV <sub>p-p</sub> 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)

