



ELECTRONICS, INC.

44 FARRAND STREET  
BLOOMFIELD, NJ 07003  
(973) 748-5089  
<http://www.nteinc.com>

## NTE1734 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	30V
Maximum Average Output Current, $I_O$ Max	
$V_{O1}$	2.0A
$V_{O2}$	1.0A
$V_{O3}$	0.5A
Maximum Peak Output Current, $I_O$ Max	
$V_{O1}$	2.5A
$V_{O2}$	2.0A
Operating Case Temperature, $T_C$ Max	+105°C
Junction Temperature, $T_J$ Max	+150°C
Storage Temperature Range, $T_{stg}$	-30° to +105°C
Thermal Resistance, Junction-to-Case, $R_{thJC}$	
$V_{O1}$	4.0°C/W
$V_{O2}$	4.5°C/W
$V_{O3}$	10°C/W

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

Parameter	Test Conditions	$V_{O1}$	$V_{O2}$	$V_{O3}$	Unit
Output Voltage Setting	Condition 1	12.0 ±0.3	9.0±0.1	5.5±0.1	V
Ripple Voltage	Condition 2	5	3	3	mV <sub>p-p</sub> Max
Temperature Coefficient	Condition 1	0.02	0.02	0.02	%/°C Max
Input Regulation	Condition 3	30	35	5	mV/V Max
Load Regulation	Condition 4	45	40	100	mV/A Max
Minimum Input-Output Voltage Difference	Condition 5	0.7	1.2	2.5	V Max

Note 1. When Pin13 is at High Level ( $\geq 3V$ ),  $V_{O3}$  is turned ON.  
When Pin13 is at Low Level ( $\leq 0.6V$ ),  $V_{O3}$  is turned OFF.

**Test Conditions:**

Condition 1:  $V_{IN}$  (DC) 1 = 17V,  $V_{IN}$  (DC) 2 = 9V,  $I_{O1}$  = 2A,  $I_{O2}$  = 1A,  $I_{O3}$  = 0.5A

Condition 2:  $V_{IN}$  (DC) 1 = 17V,  $V_{IN}$  (DC) 2 = 9V,  $I_{O1}$  =  $I_{O2}$  = 2A,  $I_{O3}$  = 0.5A, Input Ripple Voltage = 1.5V<sub>P-P</sub>

Condition 3:  $V_{IN}$  (DC) 1 = 17V ±4V,  $V_{IN}$  (DC) 2 = 9.5V ±2V

Condition 4:  $V_{IN}$  (DC) 1 = 17V,  $V_{IN}$  (DC) 2 = 9V,  $I_{O1}$  =  $I_{O2}$  = 0.2A to 2A,  $I_{O3}$  = 0 to 0.5A

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

**Pin Connection Diagram**  
(Front View)

