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## NTE7037 Integrated Circuit Module, 2 Output Positive Voltage Regulator for VCR

**Features:**

- 2 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	
$V_{O1}$	1.0A
$V_{O2}$	1.0A
Maximum Peak Output Current (Note 1), $I_O$ Max	
$V_{O1}$	2.0A
$V_{O2}$	2.0A
Operating Case Temperature, $T_C$ Max	$+105^\circ\text{C}$
Maximum 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, $R_{thJC}$	$7^\circ\text{C/W}$

Note 1. Peak Current: For 0.2sec Max.

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

Parameter	Test Conditions	$V_{O1}$	$V_{O2}$	Unit
Output Voltage Setting	Condition 1, Note 2	$9.5\pm 0.1$	$5.5\pm 0.1$	V
Output Cutoff Residual Voltage	Condition 1, Note 3	0.1	0.1	V Max
Ripple Voltage	Condition 1	5	5	$mV_{p-p}$ Max
Temperature Coefficient	Condition 1	0.02	0.035	$\%/^\circ\text{C}$ Max
Input Regulation	Condition 2	10	10	$mV/V$ Max
	Condition 3	2	2	
Load Regulation	Condition 4	50	50	$mV/A$ Max
Minimum Input-Output Voltage Difference	Condition 5	1.2	1.2	V Max

Note 2. Measurement must be made within 1 to 2 sec. after input switch is ON.

Note 3. When Pin7 is at High level (3V to 15V),  $V_{O1}$ ,  $V_{O2}$  are turned ON.  
 When Pin7 is at Low level (0.6V or less),  $V_{O1}$ ,  $V_{O2}$  are turned OFF.

**Test Conditions:**

Condition 1:  $V_B = 45V$ ,  $V_{IN} (DC) 1 = 13V$ ,  $V_{IN} (DC) 2 = 9V$ , Ripple =  $1.5mV_{p-p}$   
 $I_{O1} = 0.5A$ ,  $I_{O2} = 0.5A$

Condition 2:  $V_B = 45V \pm 5V$ ,  $V_{IN} (DC) 1 = 13V$ ,  $V_{IN} (DC) 2 = 9V$ ,  
 $I_{O1} = 0.5A$ ,  $I_{O2} = 0.5A$

Condition 3:  $V_B = 45V$ ,  $V_{IN} (DC) 1 = 10.9V$  to  $16V$ ,  $V_{IN} (DC) 2 = 16.9V$  to  $12V$ ,  
 $I_{O1} = 0.5A$ ,  $I_{O2} = 0.5A$

Condition 4:  $V_B = 45V$ ,  $V_{IN} (DC) 1 = 13V$ ,  $V_{IN} (DC) 2 = 9V$ ,  $I_{O1} = 0.1A$  to  $1A$ ,  
 $I_{O2} = 0.1A$  to  $1A$

Condition 5:  $V_B = 45V$ ,  $I_{O1} = 1A$ ,  $I_{O2} = 1A$

**Pin Connection Diagram**  
(Front View)

