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## NTE7027 Integrated Circuit Module, 3 Output Positive Voltage Regulator for VCR

**Features:**

- 3 Outputs

**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
$V_{O3}$ .....	0.5A
Maximum Peak Output Current (Note 1), $I_O$ Max	
$V_{O1}$ .....	2.0A
$V_{O2}$ .....	2.0A
$V_{O3}$ .....	0.5A
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, $R_{\theta JC}$	
$V_{O1}, V_{O2}$ .....	4.5°C/W
$V_{O3}$ .....	10°C/W

Note 1. Peak Current: For 0.1sec Max.

**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, Note 2	12.0 ±0.1	12.0 ±0.1	5.1 ±0.1	V
Ripple Voltage	Condition 2	5	5	3	mV <sub>p-p</sub> Max
Temperature Coefficient	Condition 1	0.02	0.02	0.02	%/°C Max
Input Regulation	Condition 3	35	35	5	mV/V Max
Load Regulation	Condition 4	40	40	100	mV/A Max
Minimum Input-Output Voltage Difference	Condition 5	1.2	1.2	2.5	V Max

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

**Test Conditions:**

Condition 1:  $V_{IN} (DC) 1 = 17V$ ,  $V_{IN} (DC) 2 = 9V$ ,  $I_{O1} = 0.5A$ ,  $I_{O2} = 0.5A$ ,  $I_{O3} = 0.3A$

Condition 2:  $V_{IN} (DC) 1 = 17V$ ,  $V_{IN} (DC) 2 = 9V$ ,  $I_{O1} = 0.5A$ ,  $I_{O2} = 0.5A$ ,  $I_{O3} = 0.3A$   
Input Ripple  $1.5V_{P-P}$

Condition 3:  $V_{IN} (DC) 1 = 15V$  to  $20V$ ,  $V_{IN} (DC) 2 = 7.7V$  to  $10.5V$ ,  $I_{O1} = 0.5A$ ,  $I_{O2} = 0.5A$ ,  $I_{O3} = 0.3A$

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

Condition 5:  $I_{O1} = 0.5A$ ,  $I_{O2} = 0.5A$ ,  $I_{O3} = 0.3A$ ,  $I_{B1} = I_{B2} = 2mA$

**Pin Connection Diagram**  
(Front View)

