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NTE7022 Integrated Circuit Module, 3 Output Positive Voltage Regulator for VCR

Features:

- 3 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

V_{O1}, V_{O2}	30V
V_{O3}	20V

Maximum Average Output Current, I_O Max

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

Maximum Peak Output Current (Note 1), I_O Max

V_{O1}, V_{O2}	2.5A
V_{O3}	2A

Maximum Operating Case Temperature, T_C

+105°C

Maximum Junction Temperature, T_J

+150°C

Storage Temperature Range, T_{stg}

-30° to +105°C

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

4.5°C/W

Note 1. Peak Current: For 1.0sec 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 ± 0.3	12.0 ± 0.1	5.3 ± 0.1	V
Output Cutoff Residual Voltage	Condition 1, Note 3	12.0 ± 0.3	12.0 ± 0.1	0.1	V Max
Ripple Voltage	Condition 2	20	5	5	$\text{mV}_{\text{p-p}}$ Max
Temperature Coefficient	Condition 1	0.02	0.02	0.02	%/ $^\circ\text{C}$ Max
Input Regulation	Condition 3	80	35	35	mV/V Max
Load Regulation	Condition 4	150	40	40	mV/A Max
Minimum Input-Output Voltage Difference	Condition 5	1.5	1.5	1.2	V Max

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

Note 3. When Pin2 is at High level (3V to 15V), V_{O3} is turned ON.

When Pin2 is at Low level (0.6V or less), V_{O3} is turned OFF.

Test Conditions:

- Condition 1: $V_{IN} (\text{DC}) 1 = 16V$, $V_{IN} (\text{DC}) 2 = 9V$, $I_O1 = I_O2 = 1A$, $I_O3 = 0.5A$, ($I_B1 = I_B2 = 2\text{mA}$)
Condition 2: $V_{IN} (\text{DC}) 1 = 16V$, $V_{IN} (\text{DC}) 2 = 9V$, $I_O1 = I_O2 = 1A$, $I_O3 = 0.5A$, Input Ripple Voltage = $1.5V_{P-P}$
Condition 3: $V_{IN} (\text{DC}) 1 = 14.5V$ to $22V$, $V_{IN} (\text{DC}) 2 = 6.6V$ to $11V$, $I_O1 = I_O2 = 1A$, $I_O3 = 0.5A$
Condition 4: $V_{IN} (\text{DC}) 1 = 16V$, $V_{IN} (\text{DC}) 2 = 9V$, $I_O1 = 0.3A$ to $1A$, $I_O2 = 0.3A$ to $1A$, $I_O3 = 0.1A$ to $1A$
Condition 5: $I_O1 = I_O2 = 1A$, $I_O3 = 0.5A$, $I_B1 = I_B2 = 2\text{mA}$

**Pin Connection Diagram
(Front View)**

