ELECTRONICS, INC.
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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°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°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	mV_{p-p} Max
Temperature Coefficient	Condition 1	0.02	0.02	0.02	%/°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} (DC) 1 = 16V, V_{IN} (DC) 2 = 9V, $I_O1 = I_O2$ = 1A, I_O3 = 0.5A, ($I_B1 = I_B2$ = 2mA)
Condition 2: V_{IN} (DC) 1 = 16V, V_{IN} (DC) 2 = 9V, $I_O1 = I_O2$ = 1A, I_O3 = 0.5A, Input Ripple Voltage = $1.5V_{P-P}$
Condition 3: V_{IN} (DC) 1 = 14.5V to 22V, V_{IN} (DC) 2 = 6.6V to 11V, $I_O1 = I_O2$ = 1A, I_O3 = 0.5A
Condition 4: V_{IN} (DC) 1 = 16V, V_{IN} (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, $I_B1 = I_B2$ = 2mA

Pin Connection Diagram
(Front View)