



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089

NTE7023 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	30V
V_{O1}, V_{O2}	30V
V_{O3}	20V
Maximum Output Current, I_O Max	
Average	1.0A
Peak (Note 1)	2.0A
Operating Case Temperature, T_C Max	+105°C
Junction Temperature, T_J Max	+150°C
Operating Temperature Range, T_{opr}	0° to +85°C
Storage Temperature Range, T_{stg}	-30° to +105°C
Thermal Resistance, Junction-to-Case, R_{thJC}	7.0°C/W

Note 1. Peak Current: For 0.1 sec 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	0.1	0.1	5.3 ±0.13	V Max
Ripple Voltage	Condition 2	20	5	5	mV _{p-p} Max
Temperature Coefficient	Condition 1	0.02	0.02	0.03	%/°C Max
Line Regulation	Condition 2	10	10	10	mV/V Max
	Condition 3	20	2	2	mV/V Max
Load Regulation	Condition 4	150	45	45	mV/A Max
Minimum Input-Output Voltage Difference	Condition 5	1.2	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 Pin10 is at High level (3V to 15V), V_{O1} is in OFFstate. When Pin10 is at Low level (0.6V or less), V_{O1} is in ON state.

Test Conditions:

- Condition 1: $V_B = 45V$, ripple $6V_{PP}$
 $V_{IN} (DC) 1 = 16V$, $V_{IN} (DC) 2 = 8V$, $I_{O1} = I_{O2} = I_{O3} = 0.5A$ (input ripple $1.5V_{PP}$)
- Condition 2: $V_B = 45V, \pm 6V$
 $V_{IN} (DC) 1 = 16V$, $V_{IN} (DC) 2 = 8V$, $I_{O1} = I_{O2} = I_{O3} = 0.5A$
- Condition 3: $V_B = 45V$,
 $V_{IN} (DC) 1 = 13.5V$ to $20V$, $V_{IN} (DC) 2 = 6.6V$ to $10V$, $I_{O1} = I_{O2} = I_{O3} = 0.5A$
- Condition 4: $V_B = 45V$,
 $V_{IN} (DC) 1 = 16V$, $V_{IN} (DC) 2 = 8V$, $I_{O1} = 0.3A$ to $1A$, $I_{O2} = 0.1A$ to $1A$, $I_{O3} = 0.1A$ to $1A$
- Condition 5: $V_B = 45V$, $I_{O1} = I_{O2} = I_{O3} = 0.5A$

Pin Connection Diagram
(Front View)

