ELECTRONICS, INC.
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NTE1735
Integrated Circuit
Module, 3 Output Positive Voltage Regulator for VCR

Features:
- 3 Outputs
- Cutoff Function

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Maximum DC Input Voltage, V_{IN} (DC) Max
- V_O1 . . . . . 40V
- V_O2, V_O3, V_O4 . . . . . 35V

Maximum Average Output Current, I_O Max
- V_O1, V_O 2 . . . . . 1.0A
- V_O3, V_O 4 . . . . . 1.5A

Maximum Peak Output Current (0.2sec max), I_O Max 2.5A
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_{thJC} . . . . . 4.5°C/W

Electrical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Test Conditions	V_O1	V_O2	V_O3	V_O4	Unit
Output Voltage Setting	Condition 1, Note 1	16.0 ±0.3	–	12.0±0.1	11.9±0.1	V
	Condition 1, Note 2	–	12.0±0.3	12.0±0.1	11.9±0.1	V
Ripple Voltage	Condition 2	20	20	5	5	mV_{p-p} Max
Temperature Coefficient	Condition 1	0.02	0.05	0.02	0.02	%/°C Max
Input Regulation	Condition 3	35	50	35	35	mV/V Max
Load Regulation	Condition 4	40	100	35	35	mV/A Max
Minimum Input–Output Voltage Difference	Condition 5	2.5	1.2	1.2	1.2	V Max
Minimum Output Current		–	–	–	10	mA Min
V_O1/V_O2 Select	Condition 1, Note 1	ON	–	–	–	
	Condition 1, Note 2	–	ON	–	–	
Output ON	Condition 1, Note 1	V_O1 or V_O2, V_O3 ON				
	Condition 1, Note 2	V_O1 or V_O2, V_O3 OFF				
	Condition 1, Note 3	V_O4 is always ON				

Note 1. Pin11 or Pin13 is at High Level (3V to 15V).
Note 2. Pin11 or Pin13 is at Low Level (≤ 1.2V).
Note 3. Pin11 or Pin13 is at High Level, Pin14 is at Low Level

Test Conditions:

Condition 1: V_{IN} (DC) 1 = 21V, V_{IN} (DC) 2 = 16V, I_O1 or I_O2 = I_O4 = 0.5A, I_O3 = 0.8A

Condition 2: V_{IN} (DC) 1 = 21V, V_{IN} (DC) 2 = 16V, I_O1 or I_O2 = I_O4 = 0.5A, I_O3 = 0.8A, Input Ripple Voltage = $1.5V_{P-P}$

Condition 3: V_{IN} (DC) 1 = 19V to 25V, V_{IN} (DC) 2 = 14V to 18V, I_O1 or I_O2 = I_O4 = 0.5A, I_O3 = 0.8A

Condition 4: V_{IN} (DC) 1 = 21V, V_{IN} (DC) 2 = 16V, I_O1 or I_O2 = I_O3 = I_O4 = 0.2A to 2.5A

Condition 5: I_O1 or I_O2 = I_O4 = 0.5A, I_O3 = 0.8A

Pin Connection Diagram

(Front View)



