ELECTRONICS, INC.
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NTE7035
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 30V
Maximum Average Output Current, I_O Max
- V_O1 . . . . . 1.0A
- V_O2 . . . . . 1.0A
- V_O3 . . . . . 0.6A

Maximum Peak Output Current (Note 1), I_O Max
- V_O1 . . . . . 2.5A
- V_O2 (Note 2) 2.5A
- V_O3 . . . . . 0.6A

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

Note 1. Peak Current: For 0.1sec Max.

Note 2. Must be used within the ASO range of external transistor Tr1

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

Parameter	Test Conditions	V_O1	V_O2	V_O3	Unit
Output Voltage Setting	Condition 1	12.3±0.2	6.0±0.2	5.25±0.1	V
Output Cutoff Residual Voltage	Condition 1, Note 3	0.1	5.97±0.2	0.1	V Max
Ripple Voltage	Condition 1	5	2	2	$mV_{p–p}$ Max
Temperature Coefficient	Condition 1	0.02	0.035	0.02	%/°C Max
Input Regulation	Condition 2	12	12	12	mV/V Max
	Condition 3	1	1	1	
Load Regulation	Condition 4	45	15	600	mV/A Max
Minimum Input–Output Voltage Difference	Condition 5	1.2	–	–	V Max

Note 2. External setting available

Test Conditions:

Condition 1: V_B = 45V, Ripple = 4mV_{p-p}
V_{IN} (DC) 1 = 18V, I_O1 = 0.5A, Input Ripple Voltage = 10V_{p-p},
V_{IN} (DC) 2 = 14V, I_O2 = 0.3A, I_O3 = 0.4A, Input Ripple Voltage = 10V_{p-p}

Condition 2: V_B = 45V ±7V
V_{IN} (DC) 1 = 18V, I_O1 = 0.5A
V_{IN} (DC) 2 = 14V, I_O2 = 0.3A, I_O3 = 0.4A

Condition 3: V_B = 45V
V_{IN} (DC) 1 = 18V ±4V, I_O2 = 0.5A
V_{IN} (DC) 2 = 14V ±3V, I_O2 = 0.3A, I_O3 = 0.4A

Condition 4: V_B = 45V
V_{IN} (DC) 1 = 18V, I_O1 = 0.1A to 1A, I_O3 = 0.2A to 0.6A
V_{IN} (DC) 2 = 14V, I_O2 = 0.1A to 1A

Condition 5: V_B = 45V, I_O1 = 1A, I_O2 = I_O3 = 0

Pin Connection Diagram
(Front View)