

NTE7035 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
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: ($T_A = +25^\circ\text{C}$ 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: $V_B = 45V \pm 7V$
 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 = $18V \pm 4V$, $I_{O2} = 0.5A$
 V_{IN} (DC) 2 = $14V \pm 3V$, $I_{O2} = 0.3A$, $I_{O3} = 0.4A$
- 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)

