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NTE7028 Integrated Circuit Module, 3 Output Positive Voltage Regulator for VCR

Features:

- 3 Outputs
- Cutoff 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}	1.0A
Maximum Peak Output Current (Note 1), I_O Max	
V_{O1}	2.0A
V_{O2}	2.5A
V_{O3}	2.0A
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 0.2sec 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	12.8 ±0.3	12.1 ±0.1	5.2 ±0.1	V
Ripple Voltage	Condition 1	60	3	3	mV _{p-p} Max
Output Cutoff	Condition 1, Note 3	0.1	0.1	0.1	V Max
Temperature Coefficient	Condition 1	0.03	0.02	0.02	%/°C Max
Line Regulation	Condition 2	15	–	–	mV/V Max
	Condition 3	20	2	2	
Load Regulation	Condition 4	200	45	10	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 seconds after input switch is turned ON.

Note 3. When Pin11 is at High level (3V to 15V), VO1, VO2, and VO3 are turned ON.

When Pin11 is at Low level (0.6V or less), VO1, VO2, and VO3 are turned OFF.

Test Conditions:

- Condition 1: $V_B 1 = 50V$, $V_{IN} (DC) 1 = 17V$, $V_{IN} (DC) 2 = 9V$, Input Ripple Voltage = $1.5V_{p-p}$
 $V_B 2 = 33V$, Input Ripple Voltage = $10mV_{p-p}$
 $I_{O1} = 0.5A$, $I_{O2} = 0.5A$, $I_{O3} = 0.5A$
- Condition 2: $V_B 1 = 50V \pm 5V$, $V_B 2 = 33V$, $V_{IN} (DC) 1 = 17V$, $V_{IN} (DC) 2 = 9V$
 $I_{O1} = 0.5A$, $I_{O2} = 0.5A$, $I_{O3} = 0.5A$
- Condition 3: $V_B 1 = 50V$, $V_B 2 = 33V$, $V_{IN} (DC) 1 = 14.3V$ to $21V$, $V_{IN} (DC) 2 = 6.5V$ to $11.5V$
 $I_{O1} = 0.5A$, $I_{O2} = 0.5A$, $I_{O3} = 0.5A$
- Condition 4: $V_B 1 = 50V$, $V_B 2 = 33V$, $V_{IN} (DC) 1 = 17V$, $V_{IN} (DC) 2 = 9V$
 $I_{O1} = 0.3A$ to $1A$, $I_{O2} = 0.1A$ to $1A$, $I_{O3} = 0.1A$ to $1A$
- Condition 5: $V_B 1 = 50V$, $V_B 2 = 33V$, $I_{O1} = 0.5A$, $I_{O2} = 0.5A$, $I_{O3} = 0.5A$

Pin Connection Diagram
(Front View)

