

NTE1881 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

V_{O1}, V_{O2} 30V

V_{O3} 20V

Maximum Average Output Current, I_O Max

V_{O1} 1.5A

V_{O2} 1.5A

V_{O3} 1.0A

Maximum Peak Output Current (Note 1), I_O Max

V_{O1} 2.5A

V_{O2} 2.5A

V_{O3} 2A

Operating Case Temperature, T_C Max $+105^\circ\text{C}$

Junction Temperature, T_J Max $+150^\circ\text{C}$

Storage Temperature Range, T_{stg} -30° to $+105^\circ\text{C}$

Thermal Resistance, Junction-to-Case, R_{thJC} 4.5°C/W

Note 1. Peak Current: For 1.0sec 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	12.0 ± 0.3	12.0 ± 0.1	0.1	V Max
Ripple Voltage	Condition 2	20	5	5	mV _{p-p} Max
Temperature Coefficient	Condition 1	0.02	0.02	0.02	%/ $^\circ\text{C}$ Max
Input Regulation	Condition 3	80	35	35	mV/V Max
Load Regulation	Condition 4	150	40	40	mV/A Max
Minimum Input-Output Voltage Difference	Condition 5	1.5	1.5	1.2	V Max

Note 2. Measurement must be made within 1 to 2 sec. after input switch is ON.

Note 3. When Pin2 is at High level (3V to 15V), V_{O3} is turned ON.

When Pin2 is at Low level (0.6V or less), V_{O3} is turned OFF.

Test Conditions:

- Condition 1: V_{IN} (DC) 1 = 16V, V_{IN} (DC) 2 = 9V, $I_{O1} = I_{O2} = 1A$, $I_{O3} = 0.5A$, ($I_{B1} = I_{B2} = 2mA$)
Condition 2: V_{IN} (DC) 1 = 16V, V_{IN} (DC) 2 = 9V, $I_{O1} = I_{O2} = 1A$, $I_{O3} = 0.5A$, Input Ripple Voltage = $1.5V_{P-P}$
Condition 3: V_{IN} (DC) 1 = 14.5V to 22V, V_{IN} (DC) 2 = 6.6V to 11V, $I_{O1} = I_{O2} = 1A$, $I_{O3} = 0.5A$
Condition 4: V_{IN} (DC) 1 = 16V, V_{IN} (DC) 2 = 9V, $I_{O1} = 0.3A$ to $1A$, $I_{O2} = 0.3A$ to $1A$, $I_{O3} = 0.1A$ to $1A$
Condition 5: $I_{O1} = I_{O2} = 1A$, $I_{O3} = 0.5A$, $I_{B1} = I_{B2} = 2mA$

Pin Connection Diagram
(Front View)

