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NTE1822 Integrated Circuit Module, 3 Output Positive Voltage Regulator for VCR

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_{O2} | 20V |
| Maximum Average Output Current (Note 1), I_O Max | |
| V_{O1}, V_{O2} | 1.5A |
| V_{O3} | 0.5A |
| Maximum Peak Output Current (Note 1), I_O Max | |
| V_{O1}, V_{O2} | 2.5A |
| V_{O3} | 0.5A |
| 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} | |
| V_{O1}, V_{O2} | 4.5°C/W |
| V_{O3} | 10°C/W |

Note 1. Peak Current: For 1.0sec Max ($V_{IN}(DC) 1 = 15.7V, V_{IN}(DC) 2 = 9V$)..

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 Function | Note 3 | Without | Without | With | |
| Ripple Voltage | Condition 2 | 20 | 5 | 5 | mV _{p-p} Max |
| Temperature Coefficient | Condition 1 | 0.02 | 0.02 | 0.02 | %/°C Max |
| Line Regulation | Condition 3 | 80 | 35 | 2 | mV/V Max |
| Load Regulation | Condition 4 | 150 | 40 | 100 | mV/A Max |
| Minimum Input-Output Voltage Difference | Condition 5 | 1.5 | 1.5 | 2.7 | V Max |

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

Note 3. 3V or greater: ON, 0.6V or less: OFF.

Test Conditions:

Condition 1: V_{IN} (DC) 1 = 16V, V_{IN} (DC) 2 = 9V, ($I_{B1} = I_{B2} = 2\text{mA}$), $I_{O1} = I_{O2} = 1\text{A}$, $I_{O3} = 0.5\text{A}$

Condition 2: V_{IN} (DC) 1 = 16V, V_{IN} (DC) 2 = 9V, Input Ripple Voltage = 1.5V_{P-P} ,
 $I_{O1} = I_{O2} = 1\text{A}$, $I_{O3} = 0.5\text{A}$

Condition 3: V_{IN} (DC) 1 = 14.5V to 22V, V_{IN} (DC) 2 = 8.1V to 11V, $I_{O1} = I_{O2} = 1\text{A}$, $I_{O3} = 0.5\text{A}$

Condition 4: V_{IN} (DC) 1 = 16V, V_{IN} (DC) 2 = 9V, $I_{O1} = 0.3\text{A}$ to 1A , $I_{O2} = 0.1\text{A}$ to 1A , $I_{O3} = 0.1\text{A}$ to 0.5A

Condition 5: $I_{O1} = I_{O2} = 1\text{A}$, $I_{O3} = 0.5\text{A}$, $I_{B1} = I_{B2} = 2\text{mA}$

Pin Connection Diagram
(Front View)

