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## NTE7027 Integrated Circuit Module, 3 Output Positive Voltage Regulator for VCR

**Features:**

- 3 Outputs

**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           |
| $V_{O3}$ .....  | 0.5A           |
| Maximum Peak Output Current (Note 1), $I_O$ Max       |                |
| $V_{O1}$ .....  | 2.0A           |
| $V_{O2}$ .....  | 2.0A           |
| $V_{O3}$ .....  | 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, $R_{\theta JC}$ |                |
| $V_{O1}, V_{O2}$ .....                                | 4.5°C/W        |
| $V_{O3}$ .....  | 10°C/W         |

Note 1. Peak Current: For 0.1sec 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 ±0.1 | 12.0 ±0.1 | 5.1 ±0.1 | V                     |
| Ripple Voltage                          | Condition 2         | 5         | 5         | 3        | mV <sub>p-p</sub> Max |
| Temperature Coefficient                 | Condition 1         | 0.02      | 0.02      | 0.02     | %/°C Max              |
| Input Regulation                        | Condition 3         | 35        | 35        | 5        | mV/V Max              |
| Load Regulation                         | Condition 4         | 40        | 40        | 100      | mV/A Max              |
| Minimum Input-Output Voltage Difference | Condition 5         | 1.2       | 1.2       | 2.5      | V Max                 |

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

**Test Conditions:**

Condition 1:  $V_{IN}$  (DC) 1 = 17V,  $V_{IN}$  (DC) 2 = 9V,  $I_{O1}$  = 0.5A,  $I_{O2}$  = 0.5A,  $I_{O3}$  = 0.3A

Condition 2:  $V_{IN}$  (DC) 1 = 17V,  $V_{IN}$  (DC) 2 = 9V,  $I_{O1}$  = 0.5A,  $I_{O2}$  = 0.5A,  $I_{O3}$  = 0.3A  
Input Ripple 1.5V<sub>P-P</sub>

Condition 3:  $V_{IN}$  (DC) 1 = 15V to 20V,  $V_{IN}$  (DC) 2 = 7.7V to 10.5V,  $I_{O1}$  = 0.5A,  $I_{O2}$  = 0.5A,  $I_{O3}$  = 0.3A

Condition 4:  $V_{IN}$  (DC) 1 = 17V,  $V_{IN}$  (DC) 2 = 9V,  $I_{O1}$  =  $I_{O2}$  = 0.2A to 1A,  $I_{O3}$  = 0A to 0.5A

Condition 5:  $I_{O1}$  = 0.5A,  $I_{O2}$  = 0.5A,  $I_{O3}$  = 0.3A,  $I_{B1}$  =  $I_{B2}$  = 2mA

**Pin Connection Diagram**  
(Front View)

