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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 <sub>p-p</sub> 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 =  $1.5\text{V}_{P-P}$ ,  
 $I_{O1} = I_{O2} = 1\text{A}$ ,  $I_{O3} = 0.5\text{A}$

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  $1\text{A}$ ,  $I_{O2} = 0.1\text{A}$  to  $1\text{A}$ ,  $I_{O3} = 0.1\text{A}$  to  $0.5\text{A}$

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)

