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## NTE1883 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	
$V_{O1}, V_{O2}$ .....	30V
$V_{O3}$ .....	20V
Maximum Average Output Current, $I_O$ Max	
$V_{O1}, V_{O2}$ .....	0.8A
$V_{O3}$ .....	1.0A
Maximum Peak Output Current (Note 1), $I_O$ Max	
$V_{O1}$ .....	1.0A
$V_{O2}$ .....	1.5A
$V_{O3}$ .....	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, $R_{thJC}$ .....	7.0°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 <sub>O1</sub>	V <sub>O2</sub>	V <sub>O3</sub>	Unit
Output Voltage Setting	Condition 1, Note 2	12.1 ±0.1	12.1±0.2	5.3±0.2	V
Output Cutoff Residual Voltage	Condition 1, Note 3	12.1 ±0.13	0.1	0.1	V Max
Ripple Voltage	Condition 6	5	5	5	mV <sub>p-p</sub> Max
Temperature Coefficient	Condition 1	0.02	0.02	0.025	%/°C Max
Line Regulation	Condition 2	10	10	2	mV/V Max
	Condition 3	2	2	2	
Load Regulation	Condition 4	50	300	50	mV/A Max
Minimum Input-Output Voltage Difference	Condition 5	1.2	-	1.2	V Max

### Test Conditions:

- Condition 1:  $V_B = 45V$ ,  $V_{IN} (DC) 1 = 16V$ ,  $V_{IN} (DC) 2 = 9V$ ,  $I_{O1} = 0.2A$ ,  $I_{O2} = 0.5A$ ,  $I_{O3} = 0.5A$   
Condition 2:  $V_B = 45V \pm 5V$ ,  $V_{IN} (DC) 1 = 16V$ ,  $V_{IN} (DC) 2 = 9V$ ,  $I_{O1} = 0.2A$ ,  $I_{O2} = 0.5A$ ,  $I_{O3} = 0.5A$   
Condition 3:  $V_B = 45V$ ,  $V_{IN} (DC) 1 = 13.5V$  to  $18.5V$ ,  $V_{IN} (DC) 2 = 6.7V$  to  $11.3V$ ,  $I_{O1} = 0.2A$ ,  
 $I_{O2} = 0.5A$ ,  $I_{O3} = 0.5A$   
Condition 4:  $V_B = 45V$ ,  $V_{IN} (DC) 1 = 16V$ ,  $V_{IN} (DC) 2 = 9V$ ,  $I_{O1} = 0$  to  $0.5A$ ,  $I_{O2} = 0$  to  $0.6A$ ,  
 $I_{O3} = 0.1A$  to  $1.0A$ ,  
Condition 5:  $V_B = 45V$ ,  $I_{O1} = I_{O3} = 0.5A$ ,  $I_{O2} = 0$ ,  $I_{B1} = 2mA$   
Condition 6:  $V_B = 45V$ ,  $V_{IN} (DC) 1 = 16V$ ,  $V_{IN} (DC) 2 = 9V$ , Input Ripple Voltage =  $1.5V_{P-P}$ ,  
 $I_{O1} = 0.2A$ ,  $I_{O2} = I_{O3} = 0.5A$

### Notes:

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

Note 3. When the cutoff pin (Pin2) is at high level (3V to 15V),  $V_{O2}$  and  $V_{O3}$  are in the OFF state.

**Pin Connection Diagram**  
(Front View)

