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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 _{O1}	V _{O2}	V _{O3}	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 _{p-p} 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)

