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## NTE1485 Integrated Circuit Vertical Deflection Output Circuit

**Features:**

- Low power consumption, direct deflection coil driving capability (Flyback voltage two times as high as supply voltage is supplied during flyback period only)
- High breakdown voltage  $V_{L60V}$

**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Supply Voltage, $V_{1-10}$ .....	27.6V
Circuit Voltage	
$V_{4-10}$ .....	0V to 1.5V
$V_{5-10}$ .....	0V to 2.5V
$V_{8-10}$ .....	0V to 60V
Total Current Consumption, $I_{tot}$ .....	350mA
Circuit Current	
$I_2$ .....	-1.0mA to 1.0mA
$I_3$ .....	-900mA <sub>p-p</sub> to 900mA <sub>p-p</sub>
$I_9$ .....	-900mA to 900mA
Power Dissipation, $P_D$ .....	5.5W
Operating Ambient Temperature Range, $T_{opr}$ .....	-20° to +70°C
Storage Temperature Range, $T_{stg}$ .....	-55° to +150°C
Thermal Resistance Junction-to-Case, $R_{th(j-c)}$ .....	8°C/W

Note \*. + and - are flow-in and flow-out currents to/from the circuit, respectively.

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Ambient Temperature	$I_{y(p-p)}$	$T_A = +70^\circ\text{C}$	1.31	1.45	1.59	$A_{p-p}$
Deflection Current Linearity	$\Delta I_{y(+)}$		60	-	110	$mA_{p-p}$
	$\Delta I_{y(-)}$		60	-	110	$mA_{p-p}$
Deflection Current Change with Ambient Temperature	$\Delta I_y/T_A$	$T_A = -20$ to $+70^\circ\text{C}$	-1.5	-	1.5	%
Center Voltage	$V_{MID}$		11.9	12.4	12.9	V
Flyback Pulse Amplitude	$V_{(FBP)}$		47	-	-	V
Flyback Pulse Width	$\tau_{(BLP)}$		0.9	1.02	1.08	ms
Static Circuit Current	$I_{CQ}$	$V_{8-10} = 24V, V_{1-10} = 24V, V_{4-10} = 0V$	7	15	30	mA

**Electrical Characteristics (Cont'd):** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Tr Saturation Voltage	$V_{8-9}$	$V_{8-10} = V_{1-10} = 24\text{V}$ , $V_{4-10} = 0\text{V}$ $33\Omega$ between Pins 9 & 10, $V_{5-10} = 0.3\text{V}$	-	3.0	4.0	V
	$V_{9-10}$	$V_{8-10} = V_{1-10} = 24\text{V}$ , $V_{4-10} = 0\text{V}$ $33\Omega$ between Pins 9 & 10, $V_{5-10} = 1.3\text{V}$	-	1.3	2.0	V
$Q_{21}$ Saturation Voltage	$V_{3-10}$	$V_{1-10} = 24\text{V}$ , $1.2\text{k}\Omega$ between Pins 1 & 3, $V_{4-10} = 0\text{V}$	-	-	0.5	V

**Pin Connection Diagram**

