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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 voltageL 60V

Absolute Maximum Ratings: (T_A = +25°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 . . . . . $-900mA_{p-p}$ to $900mA_{p-p}$

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°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Ambient Temperature	$I_{y(p-p)}$	T_A = +70°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 withAmbient Temperature	$\Delta I_y/T_A$	T_A = –20 to +70°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°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} = 24V, V_{4-10} = 0V 33Ω between Pins 9 & 10, V_{5-10} = 0.3V	–	3.0	4.0	V
	V_{9-10}	V_{8-10} = V_{1-10} = 24V, V_{4-10} = 0V 33Ω between Pins 9 & 10, V_{5-10} = 1.3V	–	1.3	2.0	V
Q_{21} Saturation Voltage	V_{3-10}	V_{1-10} =24V, 1.2kΩ between Pins 1 & 3, V_{4-10} = 0V	–	–	0.5	V

Pin Connection Diagram