



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>



NTE7188 Integrated Circuit TV & CRT Vertical Output with Bus Control Support

Description:

The NTE7188 is a vertical deflection output IC in a 7-Lead Staggered TO220 type package designed for high image quality TV and CRT displays that supports the use of a bus control system signal-processing IC. The sawtooth waveform from the control system signal-processing IC can directly drive the deflection yoke (including the DC components). Since the NTE7188 provides a maximum deflection current of 1.8 A_{P-P}, it is optimal for small and medium size CRTs.

Features:

- Built-In Pump-Up Circuit for Low Power Dissipation
- Vertical Output Circuits
- Thermal Protection Circuit

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Pump-Up Block Supply Voltage, +B2 max 34V
 Output Block Supply Voltage, +B6 max 70V
 Allowable Power Dissipation (Mounted on an arbitrarily large heat sink), P_dmax 9W
 Deflection Output Current, I₅max -1.5 to +1.5 A_{P-O}
 Thermal Resistance, Junction-to-Case, R_{thJC} 3°C/W
 Operating Temperature Range, T_{opr} -20° to +85°C
 Storage Temperature Range, T_{stg} -40° to +150°C

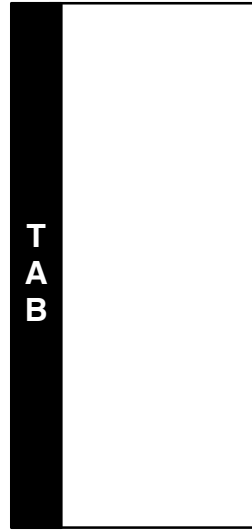
Recommended Operating Conditions: (T_A = +25°C unless otherwise specified)

Recommended Supply Voltage, +B2 24V
 Operating Supply Voltage Range, +B2_{op} 16 to 33V
 Deflection Output Current, I_{5P-P} To 1.8A_{P-P}

Electrical Characteristics: (T_A = +25°C, +B2 = 24V unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Deflection Output Saturation Voltage (Lower)	V _{sat5-4}	I ₅ = 900mA	-	-	1.3	V
Deflection Output Saturation Voltage (Upper)	V _{sat6-5}	I ₅ = -900mA	-	-	3.2	V
Pump-up Charge Saturation Voltage	V _{sat3-4}	I ₃ = 20mA	-	-	1.8	V
Pump-up Discharge Saturation Voltage	V _{sat2-3}	I ₃ = 900mA	-	-	3.0	V
Idling Current	I _{dl}		20	-	50	mA
Midpoint Voltage	V _{mid}		11	12	13	V

Pin Connection Diagram
(Front View)



- 7** Non-Inverting Input
- 6** Output Stage V_{CC}
- 5** Vertical Output
- 4** GND
- 3** Pump Up Output
- 2** V_{CC}
- 1** Inverting Input

