

NTE15002 Integrated Circuit Color TV Vertical Deflection Output Circuit

Description:

The NTE15002 is a monolithic linear IC in a 7-Lead SIP type package designed for small-aperture color TV vertical deflection output and has such features as greatly reduced number of external parts and low power dissipation. The NTE15002 can be used in conjunction with the NTE1845 for video chroma deflection use and the NTE1538 for deflection use.

Features:

- High Output
- On-Chip Pump-Up Circuit and Low Power Dissipation
- Minimum Number of External Parts Required

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

Maximum Supply Voltage, $V_{6\text{max}}$ 30V
 Maximum Supply Voltage, $V_{3\text{max}}$ 60V
 Deflection Output Current, $I_{2\text{max}}$ $\pm 1.3A_{P-O}$
 Allowable Power Dissipation, $P_{D\text{max}}$ 4.5W
 Operating Temperature Range, T_{opg} -20° to $+75^\circ\text{C}$
 Storage Temperature Range, T_{stg} -40° to $+125^\circ\text{C}$

Recommended Operating Conditions: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Recommended Supply Voltage, V_6 24V
 Operating Voltage Range, V_6 18V to 27V
 Deflection Output Current, I_{2P-P} up to $1.5A_{P-P}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 24V$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Transistor Saturation Voltage (1)			—	0.5	1.0	V
Output Transistor Saturation Voltage (2)			—	1.8	2.6	V
Pin7 Saturation Voltage (1)			—	—	1.5	V
Pin7 Saturation Voltage (2)			—	0.8	1.6	V
Quiescent Current			8.0	11.5	24.0	mA
Middle-Point Voltage			—	11	—	V

Pin Connection Diagram
(Front View)

