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°C unless otherwise specified)
- Maximum Supply Voltage, V_6 max 30V
- Maximum Supply Voltage, V_3 max 60V
- Deflection Output Current, I_2 max ±1.3A_P–O
- Allowable Power Dissipation, P_D max 4.5W
- Operating Temperature Range, T_{opg} −20°C to +75°C
- Storage Temperature Range, T_{stg} −40°C to +125°C

Recommended Operating Conditions: (T_A = +25°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°C, V_{CC} = 24V unless otherwise specified)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Test Conditions</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Unit</th>
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<tr>
<td>Output Transistor SAT Voltage (1)</td>
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<td>–</td>
<td>0.5</td>
<td>1.0</td>
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<td>V</td>
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<tr>
<td>Output Transistor SAT Voltage (2)</td>
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<td>–</td>
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<td>2.6</td>
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<td>V</td>
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<tr>
<td>Pin7 SAT Voltage (1)</td>
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<td>–</td>
<td>–</td>
<td>1.5</td>
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<td>V</td>
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<tr>
<td>Pin7 SAT Voltage (2)</td>
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<td>V</td>
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<tr>
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<tr>
<td>Middle–Point Voltage</td>
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<td>V</td>
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</table>
Pin Connection Diagram
(Front View)

- 7: Pump-Up Output
- 6: V\textsubscript{CC} 1
- 5: OSC Blocking Pin
- 4: Input
- 3: Vertical Output Power Supply
- 2: Vertical Output
- 1: GND