NTE1615
Integrated Circuit
B/W TV Tuner Bandswitch Circuit

Description:
The NTE1615 is an integrated circuit in a 9–Lead SIP type package designed for use as a B/W TV
tuner bandswitch circuit.

Features:
● Continuous VHF Band Tuning without High and Low Band Switching Operation
● Low Drain Current from Tuning Reference Voltage Supply
● High Breakdown Voltage Process

Absolute Maximum Ratings: \( (T_A = +25^\circ\text{C} \text{ unless otherwise specified}) \)
Supply Voltage, \( V_{CC} \) .................................................................................. 36V
Supply Current, \( I_1 \) .................................................................................. –10mA
Supply Current, \( I_6 \) .................................................................................. –25mA
Supply Current, \( I_8 \) .................................................................................. –10mA
Supply Current, \( I_2 \) .................................................................................. +20mA
Power Dissipation, \( P_D \) .............................................................................. 300mW
Operating Ambient Temperature Range, \( T_{opr} \) .............................................. –20° to +70°C
Storage Temperature Range, \( T_{stg} \) ................................................................. –40° to +150°C

Note  1. + and – are flow–in and flow–out current to/from the circuit respectively.

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

<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>
</tr>
</thead>
<tbody>
<tr>
<td>Circuit Current</td>
<td>( I_9 )</td>
<td>( V_3 = 16V )</td>
<td>1.0</td>
<td>1.5</td>
<td>2.0</td>
<td>mA</td>
</tr>
<tr>
<td></td>
<td>( I_4 )</td>
<td>( V_3 = 16V )</td>
<td>11</td>
<td>14</td>
<td>17</td>
<td>mA</td>
</tr>
<tr>
<td>Circuit Voltage</td>
<td>( V_{9–1} )</td>
<td>( V_3 = 14V )</td>
<td>–</td>
<td>–</td>
<td>1.5</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>( V_{9–8} )</td>
<td>( V_3 = 14V )</td>
<td>–</td>
<td>–</td>
<td>1.5</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>( V_{2–5} )</td>
<td>( V_3 = 16V )</td>
<td>–</td>
<td>–</td>
<td>0.3</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>( V_{4–6} )</td>
<td>( V_3 = 16V )</td>
<td>–</td>
<td>–</td>
<td>1.2</td>
<td>V</td>
</tr>
</tbody>
</table>
Pin Connection Diagram
(Front View)

1. UHF/VHF Band Place
2. VHF (Low) Band Place
3. Tuning Voltage
4. Voltage for Tuner
5. GND
6. VHF High/Low Switch
7. VHF High/Low Reference
8. VHF (High) Band Place
9. Input for Regulator