Octal buffers with 3-state outputs

DESCRIPTION

The HEF40244B is an octal non-inverting buffer with 3-state outputs. It features output stages with high current output capability suitable for driving highly capacitive loads.

The 3-state outputs are controlled by the output enable inputs EO_A and EO_B. A HIGH on EO causes the outputs to assume a high impedance OFF-state. The device also features hysteresis on all inputs to improve noise immunity. Schmitt-trigger action in the inputs makes the circuit highly tolerant to slower input rise and fall times.

The HEF40244B is pin and functionally compatible with the TTL '244' device.

PINNING

IA1 to IA4 inputs
IB1 to IB4 inputs
OA1 to OA4 bus outputs
OB1 to OB4 bus outputs
EO_A, EO_B output enable inputs (active LOW)

FAMILY DATA, I_DD LIMITS category buffers

See Family Specifications
Octal buffers with 3-state outputs

**HEF40244B buffers**

**RATINGS**

Limiting values in accordance with the Absolute Maximum System (IEC 134). See Family Specifications, except for:

- D.C. current into any input: $\pm I_l$ max. 10 mA
- D.C. source or sink current into any output: $\pm I_o$ max. 25 mA
- D.C. current into the supply terminals: $\pm I$ max. 100 mA

**DC CHARACTERISTICS**

$V_{SS} = 0 \text{ V}$

<table>
<thead>
<tr>
<th>$V_{DD}$ V</th>
<th>$V_{OH}$ V</th>
<th>$V_{OL}$ V</th>
<th>SYMBOL</th>
<th>$T_{amb}$ (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>−40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MIN.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output current</th>
<th>$I_{OH}$ mA</th>
<th>$I_{OL}$ mA</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>LOW</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hysteresis voltage</th>
<th>$V_H$ mV</th>
</tr>
</thead>
<tbody>
<tr>
<td>(any input)</td>
<td>10</td>
</tr>
</tbody>
</table>

Notes:
1. $H = \text{HIGH state (the more positive voltage)}$
2. $L = \text{LOW state (the less positive voltage)}$
3. $X = \text{state is immaterial}$
4. $Z = \text{high impedance off state}$