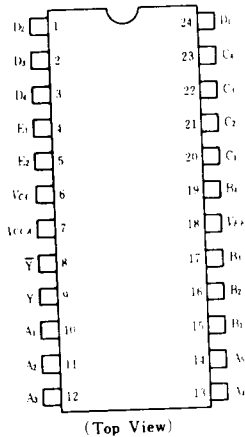


HD100118

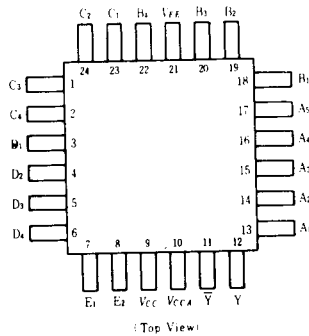
5-wide OR-AND/OR-AND-INVERT Gate

■ PIN ARRANGEMENT

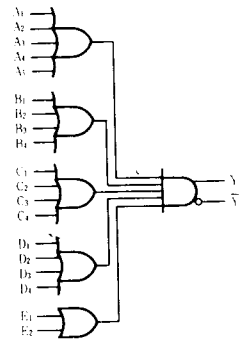
● HD100118



● HD100118F



■ LOGIC DIAGRAM



■ DC CHARACTERISTICS ($V_{EE} = -4.2$ to $-4.8V$, $V_{CC} = V_{CCA} = GND$, $T_a = 0$ to $+85^\circ C$)

| Item | Symbol | Test Condition | min | typ | max | Unit | |
|---------------|----------|------------------------|----------------|----------|----------------|------|---------|
| | | | Supply Current | I_{EE} | All input open | 27 | 39 |
| Input Current | I_{IH} | $V_{IN} = V_{IH\ max}$ | A input | — | — | 350 | μA |
| | | | B-E input | — | — | 240 | μA |

Note) As for other items, refer to the "Common DC Characteristics".

■ AC CHARACTERISTICS ($V_{EE} = -2.2$ to $-2.8V$, $V_{CC} = V_{CCA} = 2.0V$)

● HD100118

| Item | Symbol | Test Condition | 0°C | | 25°C | | | 85°C | | Unit |
|------------------------|-----------|-------------------------------|------|------|------|------|------|------|------|------|
| | | | min | max | min | typ | max | min | max | |
| Propagation Delay Time | t_{PLH} | See test circuit and waveform | 0.95 | 1.90 | 0.95 | 1.40 | 1.90 | 0.95 | 1.95 | ns |
| | t_{PHL} | | | | | | | | | |
| Transition Time | t_{TLH} | | 0.30 | 1.35 | 0.30 | 0.75 | 1.35 | 0.30 | 1.35 | ns |
| | t_{THL} | | | | | | | | | |

● HD100118F

| Item | Symbol | Test Condition | 0°C | | 25°C | | | 85°C | | Unit |
|------------------------|-----------|-------------------------------|------|------|------|------|------|------|------|------|
| | | | min | max | min | typ | max | min | max | |
| Propagation Delay Time | t_{PLH} | See test circuit and waveform | 0.80 | 1.90 | 0.85 | 1.40 | 1.90 | 0.85 | 1.95 | ns |
| | t_{PHL} | | | | | | | | | |
| Transition Time | t_{TLH} | | 0.35 | 1.20 | 0.35 | 0.75 | 1.20 | 0.35 | 1.20 | ns |
| | t_{THL} | | | | | | | | | |

Notes) The circuits in a test socket or mounted on a printed circuit board and transverse air flow greater than 2.5m/s (500 linear fpm) is maintained.