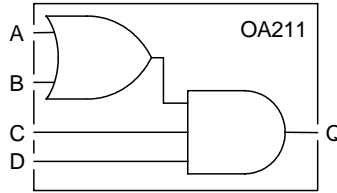


OA211 is an OR/AND circuit providing the logical function  $Q = [(A+B).C.D]$ .

### Truth Table

| A | B | C | D | Q |
|---|---|---|---|---|
| L | L | X | X | L |
| X | X | L | X | L |
| X | X | X | L | L |
| X | H | H | H | H |
| H | X | H | H | H |



### Capacitance

|   | C <sub>i</sub> (pF) |
|---|---------------------|
| A | 0.064               |
| B | 0.057               |
| C | 0.041               |
| D | 0.046               |

### Area

0.81 mils<sup>2</sup>

### Power

2.29 μW/MHz

Delay [ns] = tpd.. = f(SL, L)

with SL = Input Slope [ns] ; L = Output Load [pF]

Output Slope [ns] = op\_sl.. = f(L)

with L = Output Load [pF]

AC Characteristics : T<sub>j</sub> = 25°C VDD = 3.3V Typical Process

### AC Characteristics

| Characteristics     | Symbol   | SL = 0.1 |         |         | SL = 2.0 |         |         |
|---------------------|----------|----------|---------|---------|----------|---------|---------|
|                     |          | L = 0.1  | L = 0.7 | L = 1.0 | L = 0.1  | L = 0.7 | L = 1.0 |
| Delay A to Q        | tpdar    | 0.49     | 1.85    | 2.57    | 0.57     | 1.91    | 2.60    |
|                     | tpdaf    | 0.51     | 1.61    | 2.12    | 0.77     | 1.85    | 2.40    |
| Delay B to Q        | tpdbr    | 0.53     | 1.90    | 2.58    | 0.65     | 1.98    | 2.68    |
|                     | tpdbf    | 0.54     | 1.64    | 2.17    | 0.71     | 1.80    | 2.34    |
| Delay C to Q        | tpdcr    | 0.58     | 1.97    | 2.62    | 0.63     | 1.96    | 2.66    |
|                     | tpdcf    | 0.65     | 1.77    | 2.31    | 1.01     | 2.11    | 2.68    |
| Delay D to Q        | tpddr    | 0.59     | 1.98    | 2.63    | 0.56     | 1.89    | 2.58    |
|                     | tpddf    | 0.70     | 1.83    | 2.34    | 1.08     | 2.19    | 2.76    |
| Output Slope A to Q | op_slar  | 0.95     | 5.33    | 7.32    | 0.90     | 5.22    | 7.45    |
|                     | op_slaf  | 0.66     | 3.53    | 4.92    | 0.68     | 3.75    | 4.93    |
| Output Slope B to Q | op_slbr  | 0.95     | 5.15    | 7.55    | 0.91     | 5.25    | 7.51    |
|                     | op_slbf  | 0.67     | 3.75    | 4.95    | 0.67     | 3.72    | 5.00    |
| Output Slope C to Q | op_slcr  | 0.95     | 5.32    | 7.47    | 0.93     | 5.23    | 7.50    |
|                     | op_slcf  | 0.73     | 3.63    | 5.12    | 0.75     | 3.60    | 5.23    |
| Output Slope D to Q | op_sl dr | 0.96     | 5.28    | 7.53    | 0.93     | 5.22    | 7.45    |
|                     | op_sl df | 0.75     | 3.60    | 5.05    | 0.75     | 3.68    | 5.01    |