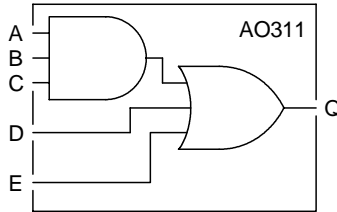


AO311 is an AND/OR circuit providing the logical function  $Q = (A.B.C+D+E)$ .

### Truth Table

A	B	C	D	E	Q
L	X	X	L	L	L
X	L	X	L	L	L
X	X	L	L	L	L
X	X	X	H	X	H
X	X	X	X	H	H
H	H	H	X	X	H



### Capacitance

	Ci (pF)
A	0.062
B	0.063
C	0.069
D	0.045
E	0.045

### Area

0.95 mils<sup>2</sup>

### Power

3.93 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 : Tj = 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	0.73	2.13	2.83	0.72	2.09	2.78
	tpdaf	0.83	1.97	2.49	0.97	2.12	2.62
Delay B to Q	tpdbr	0.72	2.13	2.80	0.82	2.20	2.91
	tpdbf	0.77	1.91	2.46	0.90	2.04	2.59
Delay C to Q	tpdcr	0.68	2.06	2.79	0.88	2.28	2.90
	tpdcf	0.72	1.83	2.37	0.83	1.97	2.48
Delay D to Q	tpddr	0.70	2.09	2.74	0.99	2.39	3.02
	tpddf	0.76	1.91	2.43	0.92	2.06	2.59
Delay E to Q	tpder	0.63	2.00	2.72	0.89	2.27	2.90
	tpdef	0.69	1.81	2.37	0.93	2.07	2.61
Output Slope A to Q	op_slar	1.00	5.28	7.36	0.97	5.28	7.51
	op_slaf	0.76	3.63	5.35	0.76	3.60	4.93
Output Slope B to Q	op_slbr	1.03	5.33	7.50	0.96	5.32	7.37
	op_slbf	0.76	3.60	5.03	0.73	3.60	5.20
Output Slope C to Q	op_slcr	1.01	5.32	7.43	0.97	5.17	7.48
	op_slcf	0.72	3.73	5.00	0.72	3.60	4.95
Output Slope D to Q	op_sl dr	0.98	5.35	7.56	1.00	5.27	7.51
	op_sl df	0.78	3.75	5.20	0.77	3.72	5.12
Output Slope E to Q	op_sl er	1.00	5.31	7.46	0.95	5.26	7.50
	op_sl ef	0.77	3.80	5.06	0.76	3.80	5.10