

# Digital Circuits

## RAY I and II Series TTL (Cont.)

Type <sup>1</sup> Number	Descriptio Description	Fanout Function	TYPICAL CHARACTERISTICS			Available Packages			
			Tpd (ns) or Toggle Rate (Min)	Avg. Pwr. Function (mW) 50% Duty	DC Noise Margin (V)	14 Pin			
						3	2K	D	DC
RG140	Quad 2 input NAND gate	15	10	15/gate	+1.1, -1.5	X	X	X	X
RG141	Quad 2 input NAND gate	7	10	15/gate	+1.1, -1.5	X	X	X	X
RG142	Quad 2 input NAND gate	12	10	15/gate	+1.1, -1.5	X	X	X	X
RG143	Quad 2 input NAND gate	6	10	15/gate	+1.1, -1.5	X	X	X	X
RG150	4-wide, 2-2-2-3 input AOI expander	—	4	5/gate	+1.1, -1.5	X	X	X	X
RG151	4-wide, 2-2-2-3 input AOI expander	—	4	5/gate	+1.1, -1.5	X	X	X	X
RG152	4-wide, 2-2-2-3 input AOI expander	—	4	5/gate	+1.1, -1.5	X	X	X	X
RG153	4-wide, 2-2-2-3 input AOI expander	—	4	5/gate	+1.1, -1.5	X	X	X	X
RG160	Triple 2 input buss driver	22	15	15/gate	+1.1, -1.5	X	X	X	X
RG161	Triple 2 input buss driver	11	15	15/gate	+1.1, -1.5	X	X	X	X
RG162	Triple 2 input buss driver	18	15	15/gate	+1.1, -1.5	X	X	X	X
RG163	Triple 2 input buss driver	9	15	15/gate	+1.1, -1.5	X	X	X	X
RG170	2-wide, 4 input AOI expander	—	1	5/gate	+1.1, -1.5	X	X	X	X
RG171	2-wide, 4 input AOI expander	—	1	5/gate	+1.1, -1.5	X	X	X	X
RG172	2-wide, 4 input AOI expander	—	1	5/gate	+1.1, -1.5	X	X	X	X
RG173	2-wide, 4 input AOI expander	—	1	5/gate	+1.1, -1.5	X	X	X	X
RG180	Dual 4 input NAND expander	—	1	1	+1.1, -1.5	X	X	X	X
RG181	Dual 4 input NAND expander	—	1	1	+1.1, -1.5	X	X	X	X
RG182	Dual 4 input NAND expander	—	1	1	+1.1, -1.5	X	X	X	X
RG183	Dual 4 input NAND expander	—	1	1	+1.1, -1.5	X	X	X	X
RG200	Expandable single 8 NAND gate	11	8	22/gate	+1.0, -1.5	X	X	X	X
RG201	Expandable single 8 NAND gate	6	8	22/gate	+1.0, -1.5	X	X	X	X
RG202	Expandable single 8 NAND gate	9	8	22/gate	+1.0, -1.5	X	X	X	X
RG203	Expandable single 8 NAND gate	5	8	22/gate	+1.0, -1.5	X	X	X	X
RG210	Expandable 2-wide, 4 input AOI gate	11	7	30	+1.0, -1.5	X	X	X	X
RG211	Expandable 2-wide, 4 input AOI gate	6	7	30	+1.0, -1.5	X	X	X	X
RG212	Expandable 2-wide, 4 input AOI gate	9	7	30	+1.0, -1.5	X	X	X	X
RG213	Expandable 2-wide, 4 input AOI gate	5	7	30	+1.0, -1.5	X	X	X	X
RG220	Quad 2 input NAND gate	11	8	22/gate	+1.0, -1.5	X	X	X	X
RG221	Quad 2 input NAND gate	6	6	22/gate	+1.0, -1.5	X	X	X	X
RG222	Quad 2 input NAND gate	9	6	22/gate	+1.0, -1.5	X	X	X	X
RG223	Quad 2 input NAND gate	5	6	22/gate	+1.0, -1.5	X	X	X	X
RG230	4-wide, 2-2-2-3 input AOI expander	—	2	7/gate	+1.0, -1.5	X	X	X	X
RG231	4-wide, 2-2-2-3 input AOI expander	—	2	7/gate	+1.0, -1.5	X	X	X	X
RG232	4-wide, 2-2-2-3 input AOI expander	—	2	7/gate	+1.0, -1.5	X	X	X	X
RG233	4-wide, 2-2-2-3 input AOI expander	—	2	7/gate	+1.0, -1.5	X	X	X	X
RG240	Dual 4 input NAND gate	11	6	22/gate	+1.0, -1.5	X	X	X	X
RG241	Dual 4 input NAND gate	6	6	22/gate	+1.0, -1.5	X	X	X	X
RG242	Dual 4 input NAND gate	9	6	22/gate	+1.0, -1.5	X	X	X	X
RG243	Dual 4 input NAND gate	5	6	22/gate	+1.0, -1.5	X	X	X	X
RG250	Expandable 4-wide, 2-2-2-3 input AOI gate	11	8	40	+1.0, -1.5	X	X	X	X
RG251	Expandable 4-wide, 2-2-2-3 input AOI gate	6	8	40	+1.0, -1.5	X	X	X	X
RG252	Expandable 4-wide, 2-2-2-3 input AOI gate	9	8	40	+1.0, -1.5	X	X	X	X
RG253	Expandable 4-wide, 2-2-2-3 input AOI gate	5	8	40	+1.0, -1.5	X	X	X	X

1. Operating temperature range, final digits 0 or 1: -55°C to +125°C; final digits 2 or 3: 0°C to +70°C.