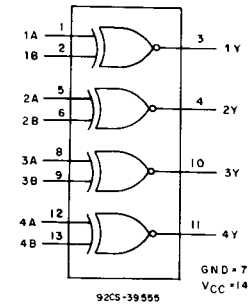
CD54HC7266/3A

Quad Exclusive NOR

The RCA CD54HC7266 contains four independent EX-CLUSIVE-NOR gates in one package. They provide the system designer with a means for implementation of the EXCLUSIVE-NOR function.
This device is functionally the same as the TTL226. They differ in that the HC7266 has active high and low outputs whereas the 226 has open collector outputs.



FUNCTIONAL DIAGRAM

Package Specifications

See Section 11, Fig. 10

Static Electrical Characteristics (Limits with black dots (•) are tested 100%

CHARACTERISTICS		TEST CONDITIONS HC V_{DD}	V_O	I_O	V_{CC} or GND	V_{IN} HC V_{IL} or V_{IH}	LIMITS MIN.	MAX.	UNITS
Quiescent Device Current I_{CC}	25°C	6	—	—	6, 0	—	—	2•	μA
	-55°C / +125°C	6	—	—	6, 0	—	—	40•	μA

The complete static electrical test specification consists of the above by-type static tests combined with the standard static tests in the beginning of this section.

Switching Speed (Limits with black dots (•) are tested 100%.)

SWITCHING CHARACTERISTICS (C_L = 50 pF, Input t_r, t_f = 6 ns)

CHARACTERISTIC	SYMBOL	TEST CONDITIONS V_{CC} V	LIMITS 25°C HC Min.	Max.	-55°C to +125°C 54HC Min.	Max.	UNITS
Propagation Delay	t_{PHL}	2	—	115	—	150	ns
		4.5	—	23•	—	35•	ns
		6	—	30	—	30	ns
Output Transition Time	t_{TLH} t_{THL}	2	—	75	—	110	ns
		4.5	—	15	—	22	ns
		6	—	13	—	19	ns
Input Capacitance	C_I	—	—	10	—	10	pF

Burn-In Test-Circuit Connections (Use Static II for /3A burn-in and Dynamic for Life Test.)

Static	STATIC BURN-IN I OPEN	GROUND	V_{CC} (6V)	STATIC BURN-IN II OPEN	GROUND	V_{CC} (6V)
CD54HC7266	3,4,10,11	1,2,5,6,7,8,9,12,13	14	3,4,10,11	7	1,2,5,6,8,9,12,13,14
Dynamic	**OPEN**	**GROUND**	**1/2 V_{CC} (3V)**	**V_{CC} (6V)**	**OSCILLATOR 50 kHz**	**25 kHz**
CD54HC7266	—	7	3,4,10,11	14	1,5,8,12	2,6,9,13

NOTE: Each pin except V_{CC} and Gnd will have a resistor of 2k-47k ohms.