



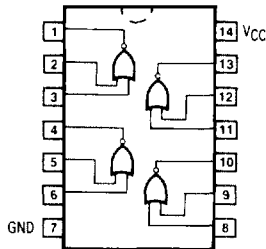
**MOTOROLA**

**MC74AC02  
MC74ACT02**

*Product Preview*

## Quad 2-Input NOR Gate

- Outputs Source/Sink 24 mA
- 'ACT02 Has TTL Compatible Inputs



QUAD 2-INPUT  
NOR GATE



N SUFFIX  
CASE 646-06  
PLASTIC



D SUFFIX  
CASE 751A-02  
PLASTIC

### DC CHARACTERISTICS (unless otherwise specified)

Symbol	Parameter	Value	Units	Test Conditions
$I_{CC}$	Maximum Quiescent Supply Current	40	$\mu A$	$V_{IN} = V_{CC}$ or Ground, $V_{CC} = 5.5 V$ , $T_A = \text{Worst Case}$
$I_{CC}$	Maximum Quiescent Supply Current	4.0	$\mu A$	$V_{IN} = V_{CC}$ or Ground, $V_{CC} = 5.5 V$ , $T_A = 25^\circ C$

### AC CHARACTERISTICS (For Figures and Waveforms — See Section 3)

Symbol	Parameter	$V_{CC}^*$ (V)	74AC			74AC		Units	Fig. No.
			$T_A = +25^\circ C$ $C_L = 50 pF$			$T_A = -40^\circ C$ to $+85^\circ C$ $C_L = 50 pF$			
			Min	Typ	Max	Min	Max		
$t_{PLH}$	Propagation Delay	3.3 5.0	1.0 1.0	5.0 4.0	7.5 6.0	1.0 1.0	8.0 6.5	ns	3-5
$t_{PHL}$	Propagation Delay	3.3 5.0	1.0 1.0	5.0 4.5	7.5 6.5	1.0 1.0	8.0 7.0	ns	3-5

\*Voltage Range 3.3 is  $3.3 V \pm 0.3 V$   
Voltage Range 5.0 is  $5.0 V \pm 0.5 V$

### AC CHARACTERISTICS — MC74ACT02 (Contact Local Motorola Sales Office)

### CAPACITANCE

Symbol	Parameter	Value Typ	Units	Test Conditions
$C_{IN}$	Input Capacitance	4.5	pF	$V_{CC} = 5.0 V$
$C_{PD}$	Power Dissipation Capacitance	30	pF	$V_{CC} = 5.0 V$

This document contains information on a product under development. Motorola reserves the right to change or discontinue this product without notice.

FACT DATA