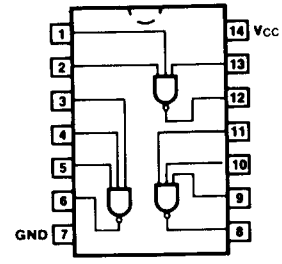
HD74AC10 • Triple 3-Input NAND Gate

• Outputs Source/Sink 24 mA

Pin Assignment



(Top View)

DC Characteristics(unless otherwise specified)

Symbol	Parameter	Max	Unit	Condition
I_{CC}	Maximum Quiescent Supply Current	40	μA	V_{IN} = V_{CC} or Ground, V_{CC} = 5.5V, Ta = Worst Case
I_{CC}	Maximum Quiescent Supply Current	4.0	μA	V_{IN} = V_{CC} or Ground, V_{CC} = 5.5V, Ta = 25°C

AC Characteristics

Symbol	Parameter	V_{CC}* (V)	Ta = +25°C, C_L = 50pF			Ta = −40°C to +85°C, C_L = 50pF		Unit
			Min	Typ	Max	Min	Max	
t_{PLH}	Propagation Delay	3.3 5.0	1.0 1.0	6.0 4.5	9.5 7.0	1.0 1.0	10.5 8.0	ns
t_{PHL}	Propagation Delay	3.3 5.0	1.0 1.0	5.5 4.0	8.5 6.0	1.0 1.0	10.0 6.5	ns

*Voltage Range 3.3 is 3.3 V ± 0.3V
Voltage Range 5.0 is 5.0 V ± 0.5V

Capacitance

Symbol	Parameter	Typ	Unit	Condition
C_{IN}	Input Capacitance	4.5	pF	V_{CC} = 5.5V
C_{PD}	Power Dissipation Capacitance	25.0	pF	V_{CC} = 5.0V

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Package Information

In the HD74AC series of Advanced CMOS logic, either plastic DIP and small outline packages can be selected.
To order, please refer to the following package code.

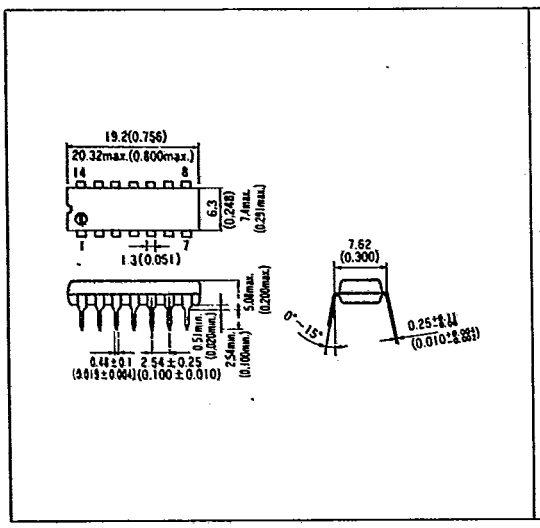
• Package code of Advanced CMOS Logic

HD74AC XXXX P

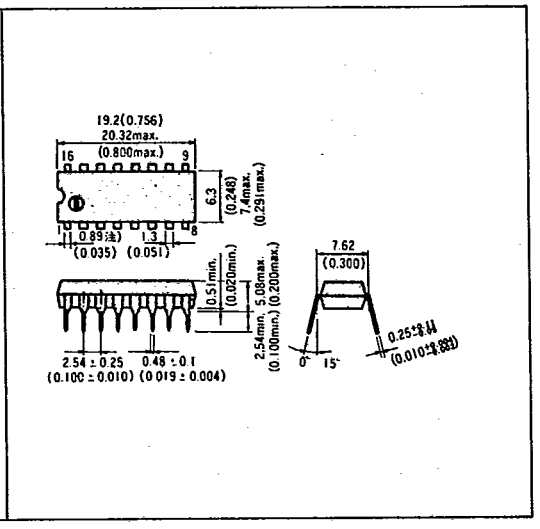
- Package code
  - P: Plastic DIP,
  - FP: Small outline package
- Individual device code
- 74AC: Commercial FACT
- 74ACT: Commercial TTL-Compatible Advanced CMOS
- Initial cad of Hitachi digital IC

Plastic DIP Package [Unit: mm (inch)]

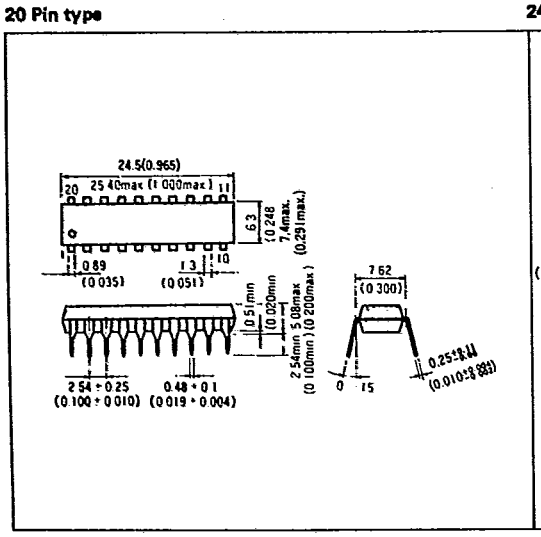
14 Pin type



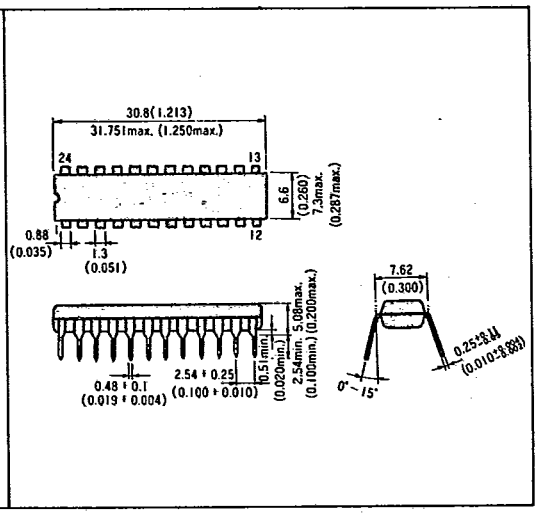
16 Pin type



20 Pin type



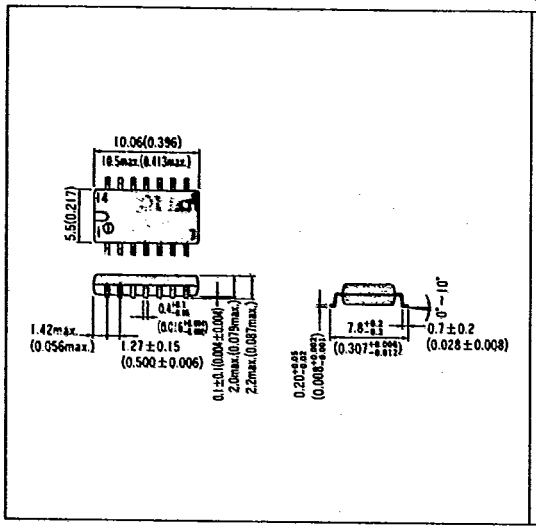
24 Pin type



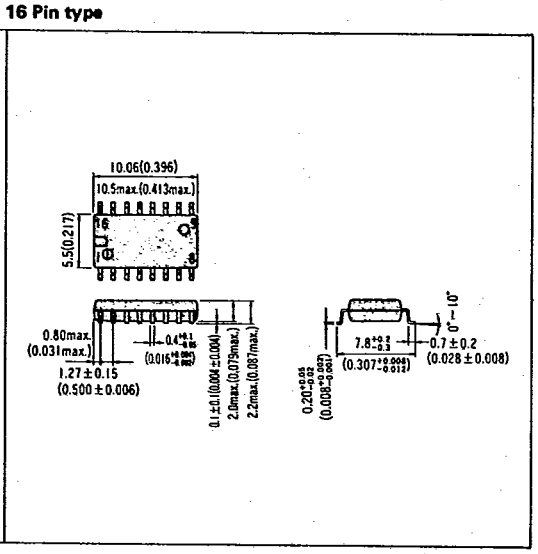
Package Information

Small Outline Package [Unit: mm (inch)]

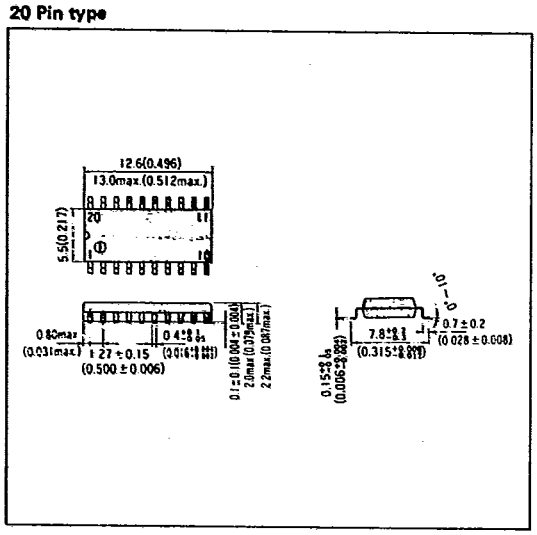
14 Pin type



16 Pin type



20 Pin type



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