



# 74AC520, 74ACT520 8-Bit Identity Comparator

## Features

- Compares two 8-bit words in 6.5ns typ.
- Expandable to any word length
- 20-pin package
- Outputs source/sink 24mA
- ACT520 has TTL-compatible inputs

## General Description

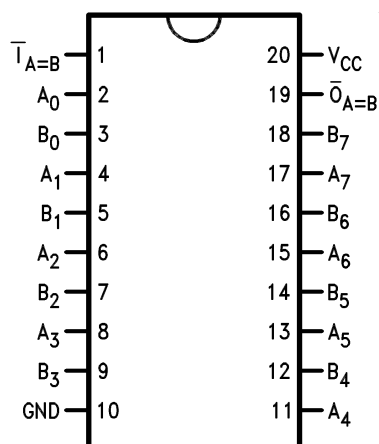
The AC/ACT520 are expandable 8-bit comparators. They compare two words of up to eight bits each and provide a LOW output when the two words match bit for bit. The expansion input  $\bar{I}_{A=B}$  also serves as an active LOW enable input.

## Ordering Information

| Order Number | Package Number | Package Description                                                             |
|--------------|----------------|---------------------------------------------------------------------------------|
| 74AC520SC    | M20B           | 20-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300" Wide Body |
| 74ACT520SC   | M20B           | 20-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300" Wide Body |
| 74ACT520SJ   | M20D           | 20-Lead Small Outline Package (SOP), EIAJ TYPE II, 5.3mm Wide                   |
| 74ACT520PC   | N20A           | 20-Lead Plastic Dual-In-Line Package (PDIP), JEDEC MS-001, 0.300" Wide          |

Device also available in Tape and Reel. Specify by appending suffix letter "X" to the ordering number.

## Connection Diagram



## Pin Descriptions

| Pin Names       | Description               |
|-----------------|---------------------------|
| $A_0-A_7$       | Word A Inputs             |
| $B_0-B_7$       | Word B Inputs             |
| $T_{A=B}$       | Expansion or Enable Input |
| $\bar{O}_{A=B}$ | Identity Output           |

## Truth Table

| Inputs          |               | Outputs         |
|-----------------|---------------|-----------------|
| $\bar{I}_{A=B}$ | A, B          | $\bar{O}_{A=B}$ |
| L               | $A = B^{(1)}$ | L               |
| L               | $A \neq B$    | H               |
| H               | $A = B^{(1)}$ | H               |
| H               | $A \neq B$    | H               |

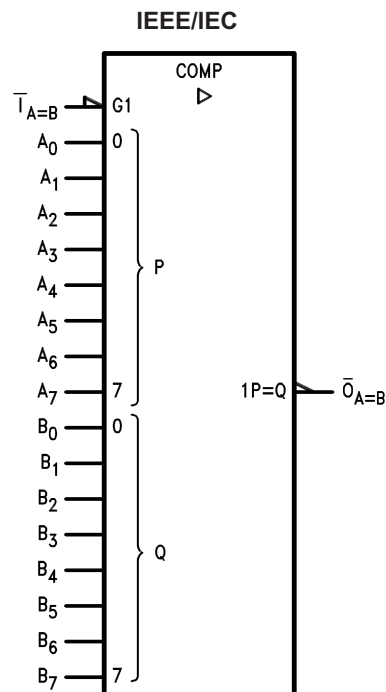
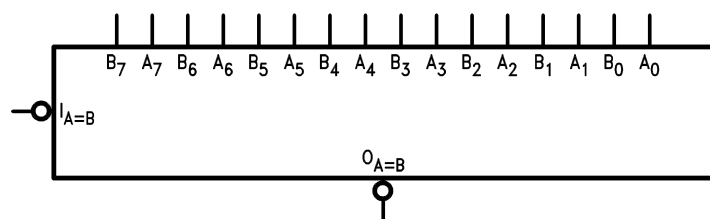
H = HIGH Voltage Level

L = LOW Voltage Level

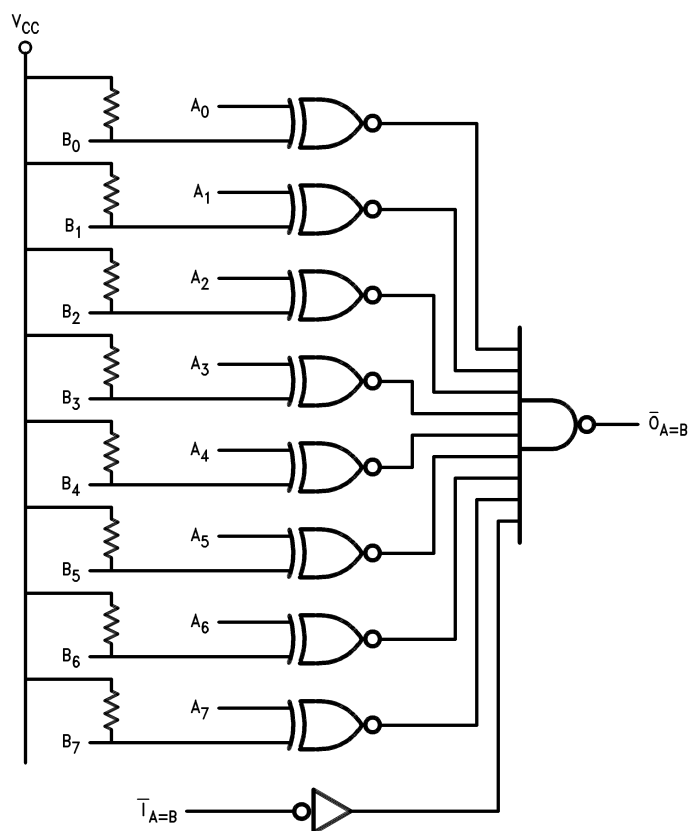
### Note:

1.  $A_0 = B_0$ ,  $A_1 = B_1$ ,  $A_2 = B_2$ , etc.

## Logic Symbols

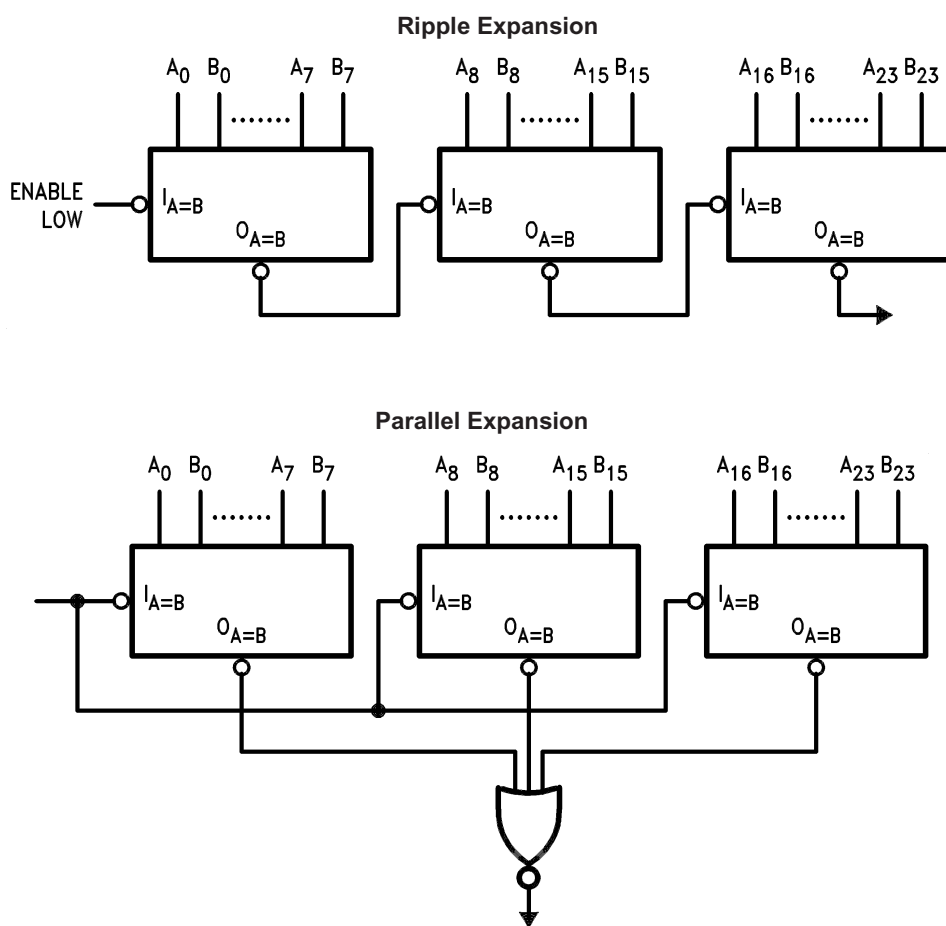


## Logic Diagram



Please note that this diagram is provided only for the understanding of logic operations and should not be used to estimate propagation delays.

## Applications



## Absolute Maximum Ratings

Stresses exceeding the absolute maximum ratings may damage the device. The device may not function or be operable above the recommended operating conditions and stressing the parts to these levels is not recommended. In addition, extended exposure to stresses above the recommended operating conditions may affect device reliability. The absolute maximum ratings are stress ratings only.

| Symbol                | Parameter                                                         | Rating                   |
|-----------------------|-------------------------------------------------------------------|--------------------------|
| $V_{CC}$              | Supply Voltage                                                    | −0.5V to +7.0V           |
| $I_{IK}$              | DC Input Diode Current<br>$V_I = -0.5V$<br>$V_I = V_{CC} + 0.5V$  | −20mA<br>+20mA           |
| $V_I$                 | DC Input Voltage                                                  | −0.5V to $V_{CC} + 0.5V$ |
| $I_{OK}$              | DC Output Diode Current<br>$V_O = -0.5V$<br>$V_O = V_{CC} + 0.5V$ | −20mA<br>+20mA           |
| $V_O$                 | DC Output Voltage                                                 | −0.5V to $V_{CC} + 0.5V$ |
| $I_O$                 | DC Output Source or Sink Current                                  | ±50mA                    |
| $I_{CC}$ or $I_{GND}$ | DC $V_{CC}$ or Ground Current per Output Pin                      | ±50mA                    |
| $T_{STG}$             | Storage Temperature                                               | −65°C to +150°C          |
| $T_J$                 | Junction Temperature                                              | 140°C                    |

## Recommended Operating Conditions

The Recommended Operating Conditions table defines the conditions for actual device operation. Recommended operating conditions are specified to ensure optimal performance to the datasheet specifications. Fairchild does not recommend exceeding them or designing to absolute maximum ratings.

| Symbol                | Parameter                                                                                                  | Rating                       |
|-----------------------|------------------------------------------------------------------------------------------------------------|------------------------------|
| $V_{CC}$              | Supply Voltage<br>AC<br>ACT                                                                                | 2.0V to 6.0V<br>4.5V to 5.5V |
| $V_I$                 | Input Voltage                                                                                              | 0V to $V_{CC}$               |
| $V_O$                 | Output Voltage                                                                                             | 0V to $V_{CC}$               |
| $T_A$                 | Operating Temperature                                                                                      | −40°C to +85°C               |
| $\Delta V / \Delta t$ | Minimum Input Edge Rate, AC Devices:<br>$V_{IN}$ from 30% to 70% of $V_{CC}$ , $V_{CC}$ @ 3.3V, 4.5V, 5.5V | 125mV/ns                     |
| $\Delta V / \Delta t$ | Minimum Input Edge Rate, ACT Devices:<br>$V_{IN}$ from 0.8V to 2.0V, $V_{CC}$ @ 4.5V, 5.5V                 | 125mV/ns                     |

## DC Electrical Characteristics for AC

| Symbol                         | Parameter                                     | V <sub>CC</sub> (V) | Conditions                                                                        | T <sub>A</sub> = +25°C |                   | T <sub>A</sub> = −40°C to +85°C |  | Units |
|--------------------------------|-----------------------------------------------|---------------------|-----------------------------------------------------------------------------------|------------------------|-------------------|---------------------------------|--|-------|
|                                |                                               |                     |                                                                                   | Typ.                   | Guaranteed Limits |                                 |  |       |
| V <sub>IH</sub>                | Minimum HIGH Level Input Voltage              | 3.0                 | V <sub>OUT</sub> = 0.1V or V <sub>CC</sub> − 0.1V                                 | 1.5                    | 2.1               | 2.1                             |  | V     |
|                                |                                               | 4.5                 |                                                                                   | 2.25                   | 3.15              | 3.15                            |  |       |
|                                |                                               | 5.5                 |                                                                                   | 2.75                   | 3.85              | 3.85                            |  |       |
| V <sub>IL</sub>                | Maximum LOW Level Input Voltage               | 3.0                 | V <sub>OUT</sub> = 0.1V or V <sub>CC</sub> − 0.1V                                 | 1.5                    | 0.9               | 0.9                             |  | V     |
|                                |                                               | 4.5                 |                                                                                   | 2.25                   | 1.35              | 1.35                            |  |       |
|                                |                                               | 5.5                 |                                                                                   | 2.75                   | 1.65              | 1.65                            |  |       |
| V <sub>OH</sub>                | Minimum HIGH Level Output Voltage             | 3.0                 | I <sub>OUT</sub> = −50μA                                                          | 2.99                   | 2.9               | 2.9                             |  | V     |
|                                |                                               | 4.5                 |                                                                                   | 4.49                   | 4.4               | 4.4                             |  |       |
|                                |                                               | 5.5                 |                                                                                   | 5.49                   | 5.4               | 5.4                             |  |       |
|                                |                                               | 3.0                 | V <sub>IN</sub> = V <sub>IL</sub> or V <sub>IH</sub> :<br>I <sub>OH</sub> = −12mA |                        | 2.56              | 2.46                            |  |       |
|                                |                                               | 4.5                 | I <sub>OH</sub> = −24mA                                                           |                        | 3.86              | 3.76                            |  |       |
|                                |                                               | 5.5                 | I <sub>OH</sub> = −24mA <sup>(2)</sup>                                            |                        | 4.86              | 4.76                            |  |       |
| V <sub>OL</sub>                | Maximum LOW Level Output Voltage              | 3.0                 | I <sub>OUT</sub> = 50μA                                                           | 0.002                  | 0.1               | 0.1                             |  | V     |
|                                |                                               | 4.5                 |                                                                                   | 0.001                  | 0.1               | 0.1                             |  |       |
|                                |                                               | 5.5                 |                                                                                   | 0.001                  | 0.1               | 0.1                             |  |       |
|                                |                                               | 3.0                 | V <sub>IN</sub> = V <sub>IL</sub> or V <sub>IH</sub> :<br>I <sub>OL</sub> = 12mA  |                        | 0.36              | 0.44                            |  |       |
|                                |                                               | 4.5                 | I <sub>OL</sub> = 24mA                                                            |                        | 0.36              | 0.44                            |  |       |
|                                |                                               | 5.5                 | I <sub>OL</sub> = 24mA <sup>(2)</sup>                                             |                        | 0.36              | 0.44                            |  |       |
| I <sub>IN</sub> <sup>(4)</sup> | Maximum Input Leakage Current                 | 5.5                 | V <sub>I</sub> = V <sub>CC</sub> , GND, A Inputs Only                             |                        | ±0.1              | ±1.0                            |  | μA    |
| I <sub>IH</sub>                | Maximum Input HIGH Leakage Current            | 5.5                 | V <sub>I</sub> = V <sub>CC</sub> , B Inputs Only                                  |                        | 10.0              | 10.0                            |  | μA    |
| I <sub>IL</sub>                | Maximum Input LOW Leakage Current             | 5.5                 | V <sub>I</sub> = V <sub>CC</sub> , B Inputs Only                                  | −0.3                   | −0.6              | −1.0                            |  | mA    |
| I <sub>OLD</sub>               | Minimum Dynamic Output Current <sup>(3)</sup> | 5.5                 | V <sub>OLD</sub> = 1.65V Max.                                                     |                        |                   | 75                              |  | mA    |
| I <sub>OHD</sub>               |                                               | 5.5                 | V <sub>OHD</sub> = 3.85V Min.                                                     |                        |                   | −75                             |  | mA    |
| I <sub>CC</sub>                | Maximum Quiescent Supply Current              | 5.5                 | V <sub>IN</sub> = V <sub>CC</sub>                                                 |                        | 4.0               | 40.0                            |  | μA    |
| I <sub>CC</sub> <sup>(4)</sup> | Maximum Quiescent Supply Current              | 5.5                 | V <sub>IN</sub> = GND                                                             | 2.3                    | 4.8               | 8.0                             |  | mA    |

**Notes:**

2. All outputs loaded; thresholds on input associated with output under test.
3. Maximum test duration 2.0ms, one output loaded at a time.
4. I<sub>IN</sub> and I<sub>CC</sub> @ 3.0V are guaranteed to be less than or equal to the respective limit @ 5.5V V<sub>CC</sub>.

## DC Electrical Characteristics for ACT

| Symbol           | Parameter                                     | V <sub>CC</sub> (V) | Conditions                                                                        | T <sub>A</sub> = +25°C |                   | T <sub>A</sub> = −40°C to +85°C |  | Units |
|------------------|-----------------------------------------------|---------------------|-----------------------------------------------------------------------------------|------------------------|-------------------|---------------------------------|--|-------|
|                  |                                               |                     |                                                                                   | Typ.                   | Guaranteed Limits |                                 |  |       |
| V <sub>IH</sub>  | Minimum HIGH Level Input Voltage              | 4.5                 | V <sub>OUT</sub> = 0.1V or V <sub>CC</sub> − 0.1V                                 | 1.5                    | 2.0               | 2.0                             |  | V     |
|                  |                                               | 5.5                 |                                                                                   | 1.5                    | 2.0               | 2.0                             |  |       |
| V <sub>IL</sub>  | Maximum LOW Level Input Voltage               | 4.5                 | V <sub>OUT</sub> = 0.1V or V <sub>CC</sub> − 0.1V                                 | 1.5                    | 0.8               | 0.8                             |  | V     |
|                  |                                               | 5.5                 |                                                                                   | 1.5                    | 0.8               | 0.8                             |  |       |
| V <sub>OH</sub>  | Minimum HIGH Level Output Voltage             | 4.5                 | I <sub>OUT</sub> = −50μA                                                          | 4.49                   | 4.4               | 4.4                             |  | V     |
|                  |                                               | 5.5                 |                                                                                   | 5.49                   | 5.4               | 5.4                             |  |       |
|                  |                                               | 4.5                 | V <sub>IN</sub> = V <sub>IL</sub> or V <sub>IH</sub> :<br>I <sub>OH</sub> = −24mA |                        | 3.86              | 3.76                            |  |       |
|                  |                                               | 5.5                 | I <sub>OH</sub> = −24mA <sup>(5)</sup>                                            |                        | 4.86              | 4.76                            |  |       |
| V <sub>OL</sub>  | Maximum LOW Level Output Voltage              | 4.5                 | I <sub>OUT</sub> = 50μA                                                           | 0.001                  | 0.1               | 0.1                             |  | V     |
|                  |                                               | 5.5                 |                                                                                   | 0.001                  | 0.1               | 0.1                             |  |       |
|                  |                                               | 4.5                 | V <sub>IN</sub> = V <sub>IL</sub> or V <sub>IH</sub> :<br>I <sub>OL</sub> = 24mA  |                        | 0.36              | 0.44                            |  |       |
|                  |                                               | 5.5                 | I <sub>OL</sub> = 24mA <sup>(5)</sup>                                             |                        | 0.36              | 0.44                            |  |       |
| I <sub>IN</sub>  | Maximum Input Leakage Current                 | 5.5                 | V <sub>I</sub> = V <sub>CC</sub> , GND                                            |                        | ±0.1              | ±1.0                            |  | μA    |
| I <sub>IH</sub>  | Maximum Input HIGH Leakage Current            | 5.5                 | V <sub>I</sub> = V <sub>CC</sub> ,<br>B Inputs Only                               |                        | 10.0              | 10.0                            |  | μA    |
| I <sub>IL</sub>  | Maximum Input LOW Leakage Current             | 5.5                 | V <sub>I</sub> = V <sub>CC</sub> ,<br>B Inputs Only                               | −0.3                   | −0.6              | −1.0                            |  | mA    |
| I <sub>CCT</sub> | Maximum I <sub>CC</sub> /Input                | 5.5                 | V <sub>I</sub> = V <sub>CC</sub> − 2.1V                                           | 0.6                    |                   | 1.5                             |  | mA    |
| I <sub>OLD</sub> | Minimum Dynamic Output Current <sup>(6)</sup> | 5.5                 | V <sub>OLD</sub> = 1.65V Max.                                                     |                        |                   | 75                              |  | mA    |
| I <sub>OHD</sub> |                                               | 5.5                 | V <sub>OHD</sub> = 3.85V Min.                                                     |                        |                   | −75                             |  | mA    |
| I <sub>CC</sub>  | Maximum Quiescent Supply Current              | 5.5                 | V <sub>IN</sub> = V <sub>CC</sub> or GND                                          |                        | 4.0               | 40.0                            |  | μA    |
| I <sub>CC</sub>  | Maximum Quiescent Supply Current              | 5.5                 | V <sub>IN</sub> = GND                                                             | 2.3                    | 4.8               | 8.0                             |  | mA    |

**Notes:**

5. All outputs loaded; thresholds on input associated with output under test.

6. Maximum test duration 2.0ms, one output loaded at a time.

**AC Electrical Characteristics for AC**

| Symbol    | Parameter                                                          | $V_{CC}$ (V) <sup>(7)</sup> | $T_A = +25^\circ\text{C}$ ,<br>$C_L = 50\text{pF}$ |      |      | $T_A = -40^\circ\text{C to } +85^\circ\text{C}$ ,<br>$C_L = 50\text{pF}$ |      | Units |
|-----------|--------------------------------------------------------------------|-----------------------------|----------------------------------------------------|------|------|--------------------------------------------------------------------------|------|-------|
|           |                                                                    |                             | Min.                                               | Typ. | Max. | Min.                                                                     | Max. |       |
| $t_{PLH}$ | Propagation Delay,<br>$A_n$ or $B_n$ to $\overline{O}_{A=B}$       | 3.3                         | 4.0                                                | 7.5  | 11.5 | 3.0                                                                      | 13.0 | ns    |
|           |                                                                    | 5.0                         | 2.5                                                | 5.5  | 8.5  | 2.0                                                                      | 9.5  |       |
| $t_{PHL}$ | Propagation Delay,<br>$A_n$ or $B_n$ to $\overline{O}_{A=B}$       | 3.3                         | 4.5                                                | 8.0  | 12.0 | 3.5                                                                      | 13.5 | ns    |
|           |                                                                    | 5.0                         | 3.0                                                | 5.5  | 9.0  | 2.5                                                                      | 10.0 |       |
| $t_{PLH}$ | Propagation Delay,<br>$\overline{I}_{A=B}$ to $\overline{O}_{A=B}$ | 3.3                         | 3.5                                                | 5.5  | 8.5  | 2.5                                                                      | 9.5  | ns    |
|           |                                                                    | 5.0                         | 2.5                                                | 4.5  | 6.5  | 2.0                                                                      | 7.0  |       |
| $t_{PHL}$ | Propagation Delay,<br>$\overline{I}_{A=B}$ to $\overline{O}_{A=B}$ | 3.3                         | 3.5                                                | 5.5  | 8.5  | 2.5                                                                      | 9.5  | ns    |
|           |                                                                    | 5.0                         | 2.5                                                | 4.5  | 6.5  | 2.0                                                                      | 7.0  |       |

**Note:**

7. Voltage range 3.3 is  $3.3\text{V} \pm 0.3\text{V}$ . Voltage range 5.0 is  $5.0\text{V} \pm 0.5\text{V}$ .

**AC Electrical Characteristics for ACT**

| Symbol    | Parameter                                                          | $V_{CC}$ (V) <sup>(8)</sup> | $T_A = +25^\circ\text{C}$ ,<br>$C_L = 50\text{pF}$ |      |      | $T_A = -40^\circ\text{C to } +85^\circ\text{C}$ ,<br>$C_L = 50\text{pF}$ |      | Units |
|-----------|--------------------------------------------------------------------|-----------------------------|----------------------------------------------------|------|------|--------------------------------------------------------------------------|------|-------|
|           |                                                                    |                             | Min.                                               | Typ. | Max. | Min.                                                                     | Max. |       |
| $t_{PLH}$ | Propagation Delay,<br>$A_n$ or $B_n$ to $\overline{O}_{A=B}$       | 5.0                         | 3.0                                                | 5.5  | 8.5  | 2.5                                                                      | 9.5  | ns    |
| $t_{PHL}$ | Propagation Delay,<br>$A_n$ or $B_n$ to $\overline{O}_{A=B}$       | 5.0                         | 3.0                                                | 6.0  | 10.0 | 2.5                                                                      | 11.5 | ns    |
| $t_{PLH}$ | Propagation Delay,<br>$\overline{I}_{A=B}$ to $\overline{O}_{A=B}$ | 5.0                         | 2.0                                                | 4.0  | 6.0  | 2.0                                                                      | 6.5  | ns    |
| $t_{PHL}$ | Propagation Delay,<br>$\overline{I}_{A=B}$ to $\overline{O}_{A=B}$ | 5.0                         | 2.5                                                | 5.0  | 7.5  | 2.0                                                                      | 8.5  | ns    |

**Note:**

8. Voltage range 5.0 is  $5.0\text{V} \pm 0.5\text{V}$

**Capacitance**

| Symbol   | Parameter                     | Conditions             | Typ. | Units |
|----------|-------------------------------|------------------------|------|-------|
| $C_{IN}$ | Input Capacitance             | $V_{CC} = \text{OPEN}$ | 4.5  | pF    |
| $C_{PD}$ | Power Dissipation Capacitance | $V_{CC} = 5.0\text{V}$ | 40   | pF    |

## Physical Dimensions

Dimensions are in inches (millimeters) unless otherwise noted.

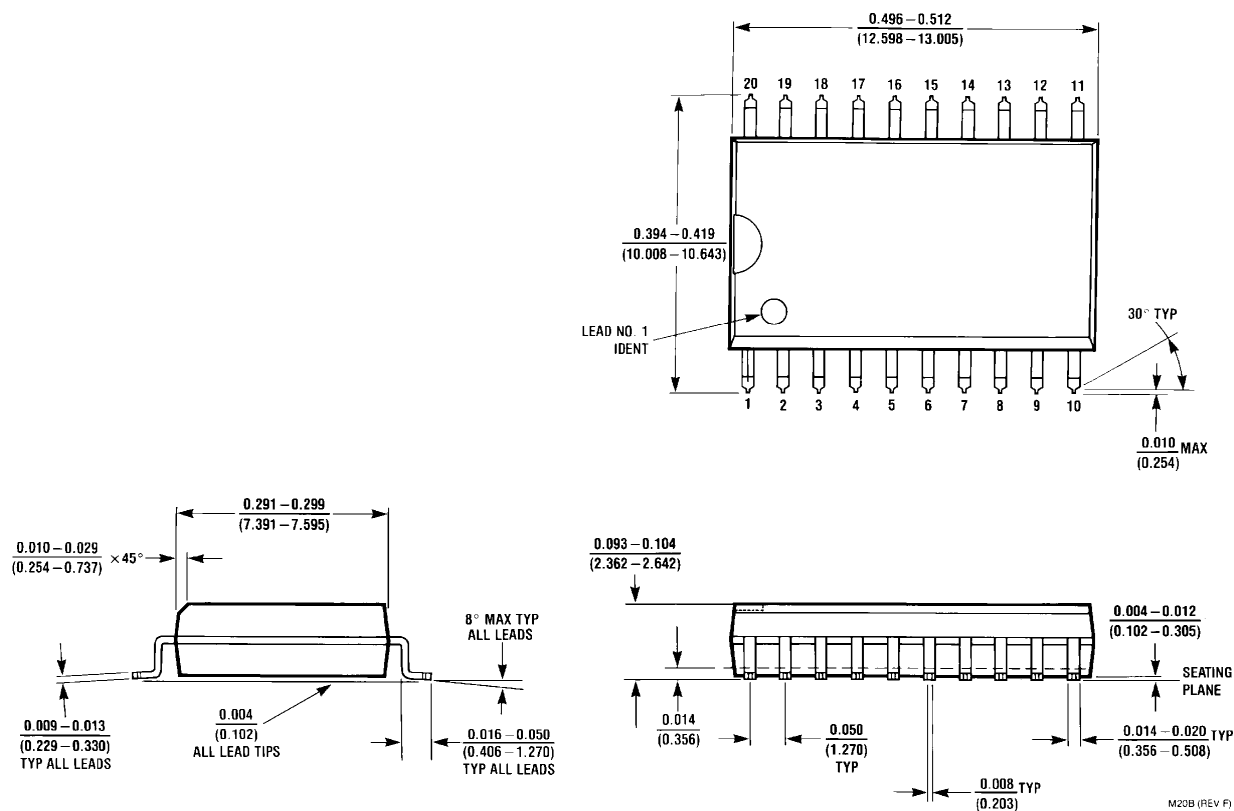
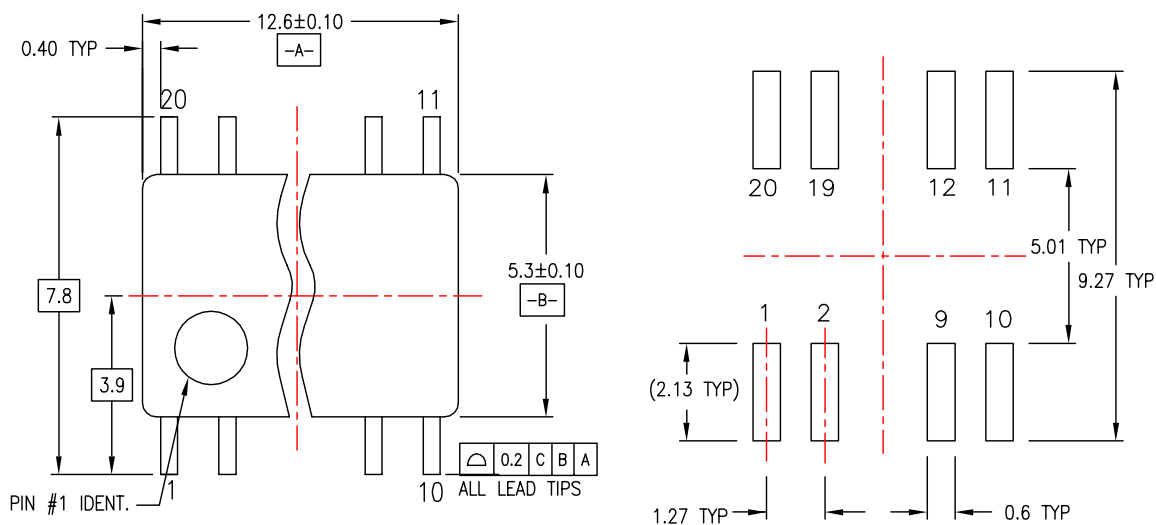


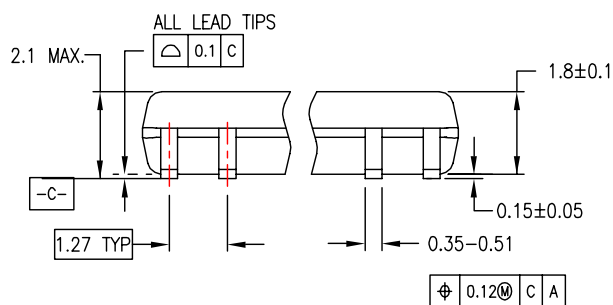
Figure 1. 20-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300" Wide Package Number M20B

### Physical Dimensions (Continued)

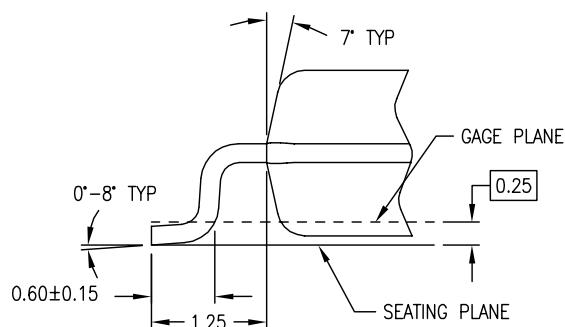
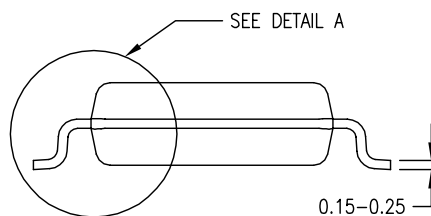
Dimensions are in millimeters unless otherwise noted.



LAND PATTERN RECOMMENDATION



DIMENSIONS ARE IN MILLIMETERS



### DETAIL A

NOTES:

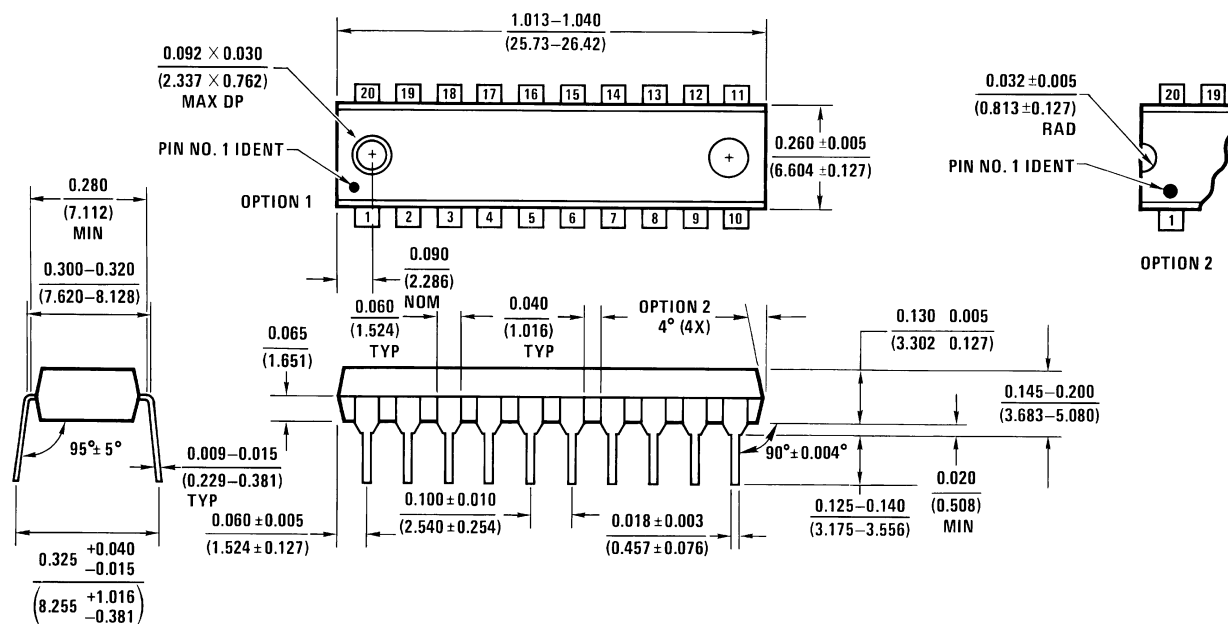
- NOTES:
- A. CONFORMS TO EIAJ EDR-7320 REGISTRATION, ESTABLISHED IN DECEMBER, 1998.
  - B. DIMENSIONS ARE IN MILLIMETERS.
  - C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR EXTRUSIONS.

M20DREVC

**Figure 2. 20-Lead Small Outline Package (SOP), EIAJ TYPE II, 5.3mm Wide  
Package Number M20D**

**Physical Dimensions** (Continued)

Dimensions are in inches (millimeters) unless otherwise noted.



N20A (REV G)

**Figure 3. 20-Lead Plastic Dual-In-Line Package (PDIP), JEDEC MS-001, 0.300" Wide  
Package Number N20A**



## TRADEMARKS

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|                                                  |                                |                                                                                     |                             |
|--------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------|-----------------------------|
| ACE <sup>®</sup>                                 | HiSeC <sup>™</sup>             | Programmable Active Droop <sup>™</sup>                                              | TinyLogic <sup>®</sup>      |
| Across the board. Around the world. <sup>™</sup> | <i>i-Lo</i> <sup>™</sup>       | QFET <sup>®</sup>                                                                   | TINYOPTO <sup>™</sup>       |
| ActiveArray <sup>™</sup>                         | ImpliedDisconnect <sup>™</sup> | QS <sup>™</sup>                                                                     | TinyPower <sup>™</sup>      |
| Bottomless <sup>™</sup>                          | IntelliMAX <sup>™</sup>        | QT Optoelectronics <sup>™</sup>                                                     | TinyWire <sup>™</sup>       |
| Build it Now <sup>™</sup>                        | ISOPLANAR <sup>™</sup>         | Quiet Series <sup>™</sup>                                                           | TruTranslation <sup>™</sup> |
| CoolFET <sup>™</sup>                             | MICROCOUPLER <sup>™</sup>      | RapidConfigure <sup>™</sup>                                                         | μSerDes <sup>™</sup>        |
| CROSSVOLT <sup>™</sup>                           | MicroPak <sup>™</sup>          | RapidConnect <sup>™</sup>                                                           | UHC <sup>®</sup>            |
| CTL <sup>™</sup>                                 | MICROWIRE <sup>™</sup>         | ScalarPump <sup>™</sup>                                                             | UniFET <sup>™</sup>         |
| Current Transfer Logic <sup>™</sup>              | MSX <sup>™</sup>               | SMART START <sup>™</sup>                                                            | VCX <sup>™</sup>            |
| DOVE <sup>™</sup>                                | MSXPro <sup>™</sup>            | SPM <sup>®</sup>                                                                    | Wire <sup>™</sup>           |
| E <sup>2</sup> CMOS <sup>™</sup>                 | OCX <sup>™</sup>               | STEALTH <sup>™</sup>                                                                |                             |
| EcoSPARK <sup>®</sup>                            | OCXPro <sup>™</sup>            | SuperFET <sup>™</sup>                                                               |                             |
| EnSigna <sup>™</sup>                             | OPTOLOGIC <sup>®</sup>         | SuperSOT <sup>™</sup> -3                                                            |                             |
| FACT Quiet Series <sup>™</sup>                   | OPTOPLANAR <sup>®</sup>        | SuperSOT <sup>™</sup> -6                                                            |                             |
| FACT <sup>®</sup>                                | PACMAN <sup>™</sup>            | SuperSOT <sup>™</sup> -8                                                            |                             |
| FAST <sup>®</sup>                                | POP <sup>™</sup>               | SyncFET <sup>™</sup>                                                                |                             |
| FASTr <sup>™</sup>                               | Power220 <sup>®</sup>          | TCM <sup>™</sup>                                                                    |                             |
| FPS <sup>™</sup>                                 | Power247 <sup>®</sup>          | The Power Franchise <sup>®</sup>                                                    |                             |
| FRFET <sup>®</sup>                               | PowerEdge <sup>™</sup>         |  ™ |                             |
| GlobalOptoisolator <sup>™</sup>                  | PowerSaver <sup>™</sup>        | TinyBoost <sup>™</sup>                                                              |                             |
| GTO <sup>™</sup>                                 | PowerTrench <sup>®</sup>       | TinyBuck <sup>™</sup>                                                               |                             |

## DISCLAIMER

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As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
2. A critical component in any component of a life support, device, or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

## PRODUCT STATUS DEFINITIONS

### Definition of Terms

| Datasheet Identification | Product Status         | Definition                                                                                                                                                                                               |
|--------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Advance Information      | Formative or In Design | This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.                                                                       |
| Preliminary              | First Production       | This datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design. |
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