－Inputs Are TTL－Voltage Compatible
－Latch－Up Performance Exceeds 250 mA Per JESD 17
－ESD Protection Exceeds JESD 22
－2000－V Human－Body Model（A114－A）
－200－V Machine Model（A115－A）

## description／ordering information

The＇AHCT126 devices are quadruple bus buffer gates featuring independent line drivers with 3－state outputs．Each output is disabled when the associated output－enable（OE）input is low．When OE is high，the respective gate passes the data from the $A$ input to its $Y$ output．

To ensure the high－impedance state during power up or power down，OE should be tied to GND through a pulldown resistor；the minimum value of the resistor is determined by the current－sourcing capability of the driver．

SN54AHCT126．．．J OR W PACKAGE SN74AHCT126 ．．．D，DB，DGV，N，NS，OR PW PACKAGE （TOP VIEW）


NC－No internal connection

ORDERING INFORMATION

| $\mathrm{T}_{\mathrm{A}}$ | PACKAGE $\dagger$ |  | ORDERABLE PART NUMBER | TOP－SIDE MARKING |
| :---: | :---: | :---: | :---: | :---: |
| $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$ | PDIP－N | Tube | SN74AHCT126N | SN74AHCT126N |
|  | SOIC－D | Tube | SN74AHCT126D | AHCT126 |
|  |  | Tape and reel | SN74AHCT126DR |  |
|  | SOP－NS | Tape and reel | SN74AHCT126NSR | AHCT126 |
|  | SSOP－DB | Tape and reel | SN74AHCT126DBR | HB126 |
|  | TSSOP－PW | Tube | SN74AHCT126PW | HB126 |
|  |  | Tape and reel | SN74AHCT126PWR |  |
|  | TVSOP－DGV | Tape and reel | SN74AHCT126DGVR | HB126 |
| $-55^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ | CDIP－J | Tube | SNJ54AHCT126J | SNJ54AHCT126J |
|  | CFP－W | Tube | SNJ54AHCT126W | SNJ54AHCT126W |
|  | LCCC－FK | Tube | SNJ54AHCT126FK | SNJ54AHCT126FK |

$\dagger$ Package drawings，standard packing quantities，thermal data，symbolization，and PCB design guidelines are available at www．ti．com／sc／package．

FUNCTION TABLE
(each buffer)

| INPUTS |  | OUTPUT |
| :---: | :---: | :---: |
| OE | A | $\mathbf{Y}$ |
| $H$ | $H$ | $H$ |
| $H$ | L | L |
| L | $X$ | $Z$ |

## logic diagram (positive logic)



Pin numbers shown are for the D, DB, DGV, J, N, NS, PW, and W packages.

## absolute maximum ratings over operating free-air temperature range (unless otherwise noted) $\dagger$


Input voltage range, $\mathrm{V}_{\mathrm{I}}$ (see Note 1) ................................................................ -0.5 V to 7 V

Input clamp current, $\mathrm{I}_{\mathrm{IK}}\left(\mathrm{V}_{\mathrm{I}}<0\right)$......................................................................... 20 mA



Package thermal impedance, $\theta_{\mathrm{JA}}$ (see Note 2): D package ........................................ $86^{\circ} \mathrm{C} / \mathrm{W}$
DB package ....................................... $96^{\circ} \mathrm{C} / \mathrm{W}$
DGV package ....................................... $127^{\circ} \mathrm{C} / \mathrm{W}$
N package ............................................. $80^{\circ} \mathrm{C} / \mathrm{W}$
NS package ...................................... $76^{\circ} \mathrm{C} / \mathrm{W}$
PW package ....................................... $113^{\circ} \mathrm{C} / \mathrm{W}$

$\dagger$ Stresses beyond those listed under "absolute maximum ratings" may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under "recommended operating conditions" is not implied. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability.
NOTES: 1. The input and output voltage ratings may be exceeded if the input and output current ratings are observed.
2. The package thermal impedance is calculated in accordance with JESD 51-7.
recommended operating conditions (see Note 3)

|  |  | SN54AHCT126 |  | SN74AHCT126 |  | UNIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MIN | MAX | MIN | MAX |  |
| $\mathrm{V}_{\mathrm{CC}}$ | Supply voltage | 4.5 | 5.5 | 4.5 | 5.5 | V |
| $\mathrm{V}_{\text {IH }}$ | High-level input voltage | 2 |  | 2 |  | V |
| $\mathrm{V}_{\mathrm{IL}}$ | Low-level input voltage |  | 0.8 |  | 0.8 | V |
| $\mathrm{V}_{1}$ | Input voltage | 0 | 5.5 | 0 | 5.5 | V |
| $\mathrm{V}_{\mathrm{O}}$ | Output voltage | 0 | $\mathrm{V}_{\mathrm{CC}}$ | 0 | $\mathrm{V}_{\mathrm{CC}}$ | V |
| ${ }^{\mathrm{IOH}}$ | High-level output current |  | -8 |  | -8 | mA |
| ${ }^{\text {IOL}}$ | Low-level output current |  | 8 |  | 8 | mA |
| $\Delta t / \Delta v$ | Input transition rise or fall rate |  | 20 |  | 20 | ns/V |
| TA | Operating free-air temperature | -55 | 125 | -40 | 85 | ${ }^{\circ} \mathrm{C}$ |

NOTE 3: All unused inputs of the device must be held at $\mathrm{V}_{\mathrm{CC}}$ or GND to ensure proper device operation. Refer to the TI application report, Implications of Slow or Floating CMOS Inputs, literature number SCBA004.
electrical characteristics over recommended operating free-air temperature range (unless otherwise noted)

| PARAMETER | TEST CONDITIONS | $V_{C C}$ | $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$ |  | SN54AHCT126 | SN74AHCT126 | UNIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | MIN | TYP MAX | MIN MAX | MIN MAX |  |
| $\mathrm{V}_{\mathrm{OH}}$ | $\mathrm{I} \mathrm{OH}=-50 \mu \mathrm{~A}$ | 4.5 V | 4.4 | 4.5 | 4.4 | 4.4 | V |
|  | $\mathrm{IOH}=-8 \mathrm{~mA}$ |  | 3.94 |  | 3.8 | 3.8 |  |
| VOL | $\mathrm{l} \mathrm{OL}=50 \mu \mathrm{~A}$ | 4.5 V |  | 0.1 | 0.1 | 0.1 | V |
|  | $\mathrm{IOL}=8 \mathrm{~mA}$ |  |  | 0.36 | 0.44 | 0.44 |  |
| 1 | $\mathrm{V}_{\mathrm{I}}=5.5 \mathrm{~V}$ or GND | 0 V to 5.5 V |  | $\pm 0.1$ | $\pm 1^{*}$ | $\pm 1$ | $\mu \mathrm{A}$ |
| l OZ | $\mathrm{V}_{\mathrm{O}}=\mathrm{V}_{\mathrm{CC}}$ or GND | 5.5 V |  | $\pm 0.25$ | $\pm 2.5$ | $\pm 2.5$ | $\mu \mathrm{A}$ |
| ICC | $\mathrm{V}_{\mathrm{I}}=\mathrm{V}_{\mathrm{CC}}$ or GND, $\quad \mathrm{IO}=0$ | 5.5 V |  | 2 | 20 | 20 | $\mu \mathrm{A}$ |
| $\Delta_{\text {cc }}{ }^{\dagger}$ | One input at 3.4 V , Other inputs at $\mathrm{V}_{\mathrm{CC}}$ or GND | 5.5 V |  | 1.35 | 1.5 | 1.5 | mA |
| $\mathrm{C}_{\mathrm{i}}$ | $\mathrm{V}_{1}=\mathrm{V}_{\text {CC }}$ or GND | 5 V |  | $4 \quad 10$ |  | 10 | pF |
| $\mathrm{C}_{0}$ | $\mathrm{V}_{\mathrm{O}}=\mathrm{V}_{\text {CC }}$ or GND | 5 V |  | 15 |  |  | pF |

[^0]switching characteristics over recommended operating free-air temperature range, $\mathrm{V}_{\mathrm{CC}}=5 \mathrm{~V} \pm 0.5 \mathrm{~V}$ (unless otherwise noted) (see Figure 1)

| PARAMETER | FROM (INPUT) | TO (OUTPUT) | LOAD CAPACITANCE | $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$ |  |  | SN54AHCT126 |  | SN74AHCT126 |  | UNIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | MIN | TYP | MAX | MIN | MAX | MIN | MAX |  |
| tPLH | A | Y | $C_{L}=15 \mathrm{pF}$ |  | 3.8* | 5.5* | 1* | 6.5* | 1 | 6.5 | ns |
| tPHL |  |  |  |  | 3.8* | 5.5* | 1* | $6.5^{*}$ | 1 | 6.5 |  |
| tPZH | OE | Y | $C_{L}=15 \mathrm{pF}$ |  | 3.6 * | 5.1* | $1^{*}$ | $6^{*}$ | 1 | 6 | ns |
| tPZL |  |  |  |  | $3.6 *$ | 5.1* | 1* | $6^{*}$ | 1 | 6 |  |
| tPHZ | OE | Y | $C_{L}=15 \mathrm{pF}$ |  | 4.6 * | $6.8{ }^{*}$ | 1* | $8^{*}$ | 1 | 8 | ns |
| tpLZ |  |  |  |  | 4.6* | $6.8 *$ | 1* | 8* | 1 | 8 |  |
| tPLH | A | Y | $\mathrm{C}_{\mathrm{L}}=50 \mathrm{pF}$ |  | 5.3 | 7.5 | 1 | 8.5 | 1 | 8.5 | ns |
| tPHL |  |  |  |  | 5.3 | 7.5 | 1 | 8.5 | 1 | 8.5 |  |
| tPZH | OE | Y | $\mathrm{C}_{\mathrm{L}}=50 \mathrm{pF}$ |  | 5.1 | 7.1 | 1 | 8 | 1 | 8 | ns |
| tPZL |  |  |  |  | 5.1 | 7.1 | 1 | 8 | 1 | 8 |  |
| tPHZ | OE | Y | $\mathrm{C}_{\mathrm{L}}=50 \mathrm{pF}$ |  | 6.1 | 8.8 | 1 | 10 | 1 | 10 | ns |
| tPLZ |  |  |  |  | 6.1 | 8.8 | 1 | 10 | 1 | 10 |  |
| $\mathrm{t}_{\text {sk(0) }}$ |  |  | $\mathrm{C}_{\mathrm{L}}=50 \mathrm{pF}$ |  |  | $1^{* *}$ |  |  |  | 1 | ns |

* On products compliant to MIL-PRF-38535, this parameter is not production tested.
** On products compliant to MIL-PRF-38535, this parameter does not apply.
noise characteristics, $\mathrm{V}_{\mathrm{CC}}=5 \mathrm{~V}, \mathrm{C}_{\mathrm{L}}=50 \mathrm{pF}, \mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$ (see Note 4)

| PARAMETER | SN74AHCT126 | UNIT |  |
| :--- | :--- | ---: | :---: |
|  |  |  | MAX |
|  |  |  |  |
| $\mathrm{V}_{\mathrm{OL}(\mathrm{P})}$ | Quiet output, maximum dynamic $\mathrm{V}_{\mathrm{OL}}$ | 0.8 | V |
| $\mathrm{~V}_{\mathrm{OL}(\mathrm{V})}$ | Quiet output, minimum dynamic $\mathrm{V}_{\mathrm{OL}}$ | -0.8 | V |
| $\mathrm{~V}_{\mathrm{OH}(\mathrm{V})}$ | Quiet output, minimum dynamic $\mathrm{V}_{\mathrm{OH}}$ | 4.4 | V |
| $\mathrm{~V}_{\mathrm{IH}(\mathrm{D})}$ | High-level dynamic input voltage | 2 | V |
| $\mathrm{~V}_{\mathrm{IL}(\mathrm{D})}$ | Low-level dynamic input voltage |  | 0.8 |

NOTE 4: Characteristics are for surface-mount packages only.
operating characteristics, $\mathrm{V}_{\mathrm{CC}}=5 \mathrm{~V}, \mathrm{~T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$

| PARAMETER | TEST CONDITIONS | TYP | UNIT |
| :---: | :---: | :---: | :---: |
| $\mathrm{C}_{\text {pd }}$ | Power dissipation capacitance | No load, $\quad \mathrm{f}=1 \mathrm{MHz}$ | 14 | pF.

## PARAMETER MEASUREMENT INFORMATION



Figure 1. Load Circuit and Voltage Waveforms

## PACKAGING INFORMATION

| Orderable Device | Status ${ }^{(1)}$ | Package Type | Package Drawing | Pins | Package Qty | $\text { Eco Plan }{ }^{(2)}$ | Lead/Ball Finish | MSL Peak Temp ${ }^{(3)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5962-9686301Q2A | ACTIVE | LCCC | FK | 20 | 1 | TBD | Call TI | Level-NC-NC-NC |
| 5962-9686301QCA | ACTIVE | CDIP | J | 14 | 1 | TBD | Call TI | Level-NC-NC-NC |
| 5962-9686301QDA | ACTIVE | CFP | W | 14 | 1 | TBD | Call TI | Level-NC-NC-NC |
| SN74AHCT126D | ACTIVE | SOIC | D | 14 | 50 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br} \text { ) } \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126DBLE | OBSOLETE | SSOP | DB | 14 |  | TBD | Call TI | Call TI |
| SN74AHCT126DBR | ACTIVE | SSOP | DB | 14 | 2000 | $\begin{gathered} \hline \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br} \text { ) } \\ \hline \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126DBRE4 | ACTIVE | SSOP | DB | 14 | 2000 | Green (RoHS \& no $\mathrm{Sb} / \mathrm{Br}$ ) | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126DE4 | ACTIVE | SOIC | D | 14 | 50 | Green (RoHS \& no $\mathrm{Sb} / \mathrm{Br})$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126DGVR | ACTIVE | TVSOP | DGV | 14 | 2000 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br}) \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126DGVRE4 | ACTIVE | TVSOP | DGV | 14 | 2000 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br}) \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126DR | ACTIVE | SOIC | D | 14 | 2500 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br} \text { ) } \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126DRE4 | ACTIVE | SOIC | D | 14 | 2500 | Green (RoHS \& no Sb/Br) | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126N | ACTIVE | PDIP | N | 14 | 25 | Pb-Free (RoHS) | CU NIPDAU | Level-NC-NC-NC |
| SN74AHCT126NSR | ACTIVE | SO | NS | 14 | 2000 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br} \text { ) } \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126NSRE4 | ACTIVE | SO | NS | 14 | 2000 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br} \text { ) } \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126PW | ACTIVE | TSSOP | PW | 14 | 90 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br} \text { ) } \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126PWG4 | ACTIVE | TSSOP | PW | 14 | 90 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br} \text { ) } \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126PWLE | OBSOLETE | TSSOP | PW | 14 |  | TBD | Call TI | Call TI |
| SN74AHCT126PWR | ACTIVE | TSSOP | PW | 14 | 2000 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br} \text { ) } \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SN74AHCT126PWRG4 | ACTIVE | TSSOP | PW | 14 | 2000 | $\begin{gathered} \text { Green (RoHS \& } \\ \text { no } \mathrm{Sb} / \mathrm{Br} \text { ) } \end{gathered}$ | CU NIPDAU | Level-1-260C-UNLIM |
| SNJ54AHCT126FK | ACTIVE | LCCC | FK | 20 | 1 | TBD | Call TI | Level-NC-NC-NC |
| SNJ54AHCT126J | ACTIVE | CDIP | J | 14 | 1 | TBD | Call TI | Level-NC-NC-NC |
| SNJ54AHCT126W | ACTIVE | CFP | W | 14 | 1 | TBD | Call TI | Level-NC-NC-NC |

${ }^{(1)}$ The marketing status values are defined as follows:
ACTIVE: Product device recommended for new designs.
LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.
NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.
PREVIEW: Device has been announced but is not in production. Samples may or may not be available.
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[^1]Pb-Free (RoHS): Tl's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed $0.1 \%$ by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb -Free products are suitable for use in specified lead-free processes.
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${ }^{(3)}$ MSL, Peak Temp. -- The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

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| DIM PINS ** | 14 | 16 | 18 | 20 |
| :---: | :---: | :---: | :---: | :---: |
| A | 0.300 <br> $(7,62)$ <br> BSC | 0.300 <br> $(7,62)$ <br> BSC | 0.300 <br> $(7,62)$ <br> BSC | 0.300 <br> $(7,62)$ <br> BSC |
| B MAX | 0.785 <br> $(19,94)$ | .840 <br> $(21,34)$ | 0.960 <br> $(24,38)$ | 1.060 <br> $(26,92)$ |
| B MIN | - | - | - | - |
| C MAX | 0.300 <br> $(7,62)$ | 0.300 <br> $(7,62)$ | 0.310 <br> $(7,87)$ | 0.300 <br> $(7,62)$ |
| C MIN | 0.245 <br> $(6,22)$ | 0.245 <br> $(6,22)$ | 0.220 <br> $(5,59)$ | 0.245 <br> $(6,22)$ |



NOTES: A. All linear dimensions are in inches (millimeters).
B. This drawing is subject to change without notice.
C. This package is hermetically sealed with a ceramic lid using glass frit.
D. Index point is provided on cap for terminal identification only on press ceramic glass frit seal only.
E. Falls within MIL STD 1835 GDIP1-T14, GDIP1-T16, GDIP1-T18 and GDIP1-T20.

## W (R-GDFP-F14)



NOTES: A. All linear dimensions are in inches (millimeters).
B. This drawing is subject to change without notice.
C. This package can be hermetically sealed with a ceramic lid using glass frit.
D. Index point is provided on cap for terminal identification only.
E. Falls within MIL STD 1835 GDFP1-F14 and JEDEC MO-092AB

FK (S-CQCC-N**)


NOTES: A. All linear dimensions are in inches (millimeters).
B. This drawing is subject to change without notice.
C. This package can be hermetically sealed with a metal lid.
D. The terminals are gold plated.
E. Falls within JEDEC MS-004

N (R-PDIP-T**)
PLASTIC DUAL-IN-LINE PACKAGE
16 PINS SHOWN


NOTES: A. All linear dimensions are in inches (millimeters).
B. This drawing is subject to change without notice.
C) Falls within JEDEC MS-001, except 18 and 20 pin minimum body length (Dim A).

D The 20 pin end lead shoulder width is a vendor option, either half or full width.


| PIM ** | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{3 8}$ | $\mathbf{4 8}$ | $\mathbf{5 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A MAX | 3,70 | 3,70 | 5,10 | 5,10 | 7,90 | 9,80 | 11,40 |
| A MIN | 3,50 | 3,50 | 4,90 | 4,90 | 7,70 | 9,60 | 11,20 |

NOTES: A. All linear dimensions are in millimeters.
B. This drawing is subject to change without notice.
C. Body dimensions do not include mold flash or protrusion, not to exceed 0,15 per side.
D. Falls within JEDEC: $24 / 48$ Pins - MO-153

14/16/20/56 Pins - MO-194

D (R-PDSO-G14)

## PLASTIC SMALL-OUTLINE PACKAGE



NOTES: A. All linear dimensions are in inches (millimeters).
B. This drawing is subject to change without notice.
C. Body dimensions do not include mold flash or protrusion not to exceed $0.006(0,15)$.
D. Falls within JEDEC MS-012 variation AB.

NS (R-PDSO-G**)
14-PINS SHOWN


| DIM PINS ** | 14 | 16 | 20 | 24 |
| :---: | :---: | :---: | :---: | :---: |
| A MAX | 10,50 | 10,50 | 12,90 | 15,30 |
| A MIN | 9,90 | 9,90 | 12,30 | 14,70 |

NOTES: A. All linear dimensions are in millimeters.
B. This drawing is subject to change without notice.
C. Body dimensions do not include mold flash or protrusion, not to exceed 0,15.


| DIM PINS ** | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ | $\mathbf{3 0}$ | $\mathbf{3 8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A MAX | 6,50 | 6,50 | 7,50 | 8,50 | 10,50 | 10,50 | 12,90 |
| A MIN | 5,90 | 5,90 | 6,90 | 7,90 | 9,90 | 9,90 | 12,30 |

NOTES: A. All linear dimensions are in millimeters.
B. This drawing is subject to change without notice.
C. Body dimensions do not include mold flash or protrusion not to exceed 0,15.
D. Falls within JEDEC MO-150


| PIMS $^{* *}$ | $\mathbf{8}$ | $\mathbf{1 4}$ | $\mathbf{1 6}$ | $\mathbf{2 0}$ | $\mathbf{2 4}$ | $\mathbf{2 8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A MAX | 3,10 | 5,10 | 5,10 | 6,60 | 7,90 | 9,80 |
| A MIN | 2,90 | 4,90 | 4,90 | 6,40 | 7,70 | 9,60 |

NOTES: A. All linear dimensions are in millimeters.
B. This drawing is subject to change without notice.
C. Body dimensions do not include mold flash or protrusion not to exceed 0,15 .
D. Falls within JEDEC MO-153

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[^0]:    * On products compliant to MIL-PRF-38535, this parameter is not production tested at $\mathrm{V}_{\mathrm{CC}}=0 \mathrm{~V}$.
    $\dagger$ This is the increase in supply current for each input at one of the specified TTL voltage levels, rather than 0 V or $\mathrm{V}_{\mathrm{CC}}$.

[^1]:    ${ }^{(2)}$ Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS) or Green (RoHS \& no Sb/Br) - please check http://www.ti.com/productcontent for the latest availability information and additional product content details.
    TBD: The Pb-Free/Green conversion plan has not been defined.

