

# 74HC126-Q100; 74HCT126-Q100

Quad buffer/line driver; 3-state

Rev. 1 — 20 March 2013

Product data sheet

## 1. General description

The 74HC126-Q100; 74HCT126-Q100 is a quad buffer/line driver with 3-state outputs controlled by the output enable inputs (nOE). A LOW on nOE causes the outputs to assume a high impedance OFF-state. Inputs include clamp diodes. This enables the use of current limiting resistors to interface inputs to voltages in excess of  $V_{CC}$ .

This product has been qualified to the Automotive Electronics Council (AEC) standard Q100 (Grade 1) and is suitable for use in automotive applications.

## 2. Features and benefits

- Automotive product qualification in accordance with AEC-Q100 (Grade 1)
  - ◆ Specified from  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$  and from  $-40\text{ }^{\circ}\text{C}$  to  $+125\text{ }^{\circ}\text{C}$
- Inverting outputs
- Complies with JEDEC standard no. 7A
- Input levels:
  - ◆ For 74HC126-Q100: CMOS level
  - ◆ For 74HCT126-Q100: TTL level
- ESD protection:
  - ◆ MIL-STD-883, method 3015 exceeds 2000 V
  - ◆ HBM JESD22-A114F exceeds 2000 V
  - ◆ MM JESD22-A115-A exceeds 200 V ( $C = 200\text{ pF}$ ,  $R = 0\text{ }\Omega$ )
- Multiple package options

## 3. Ordering information

Table 1. Ordering information

| Type number                       | Package   |         |  | Version  |
|-----------------------------------|---|---------|--|----------|
|                                   | Temperature range   | Name    | Description  |          |
| 74HC126D-Q100<br>74HCT126D-Q100   | $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$ | SO14    | plastic small outline package; 14 leads; body width 3.9 mm             | SOT108-1 |
| 74HC126PW-Q100<br>74HCT126PW-Q100 | $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$ | TSSOP14 | plastic thin shrink small outline package; 14 leads; body width 4.4 mm | SOT402-1 |



## 4. Functional diagram

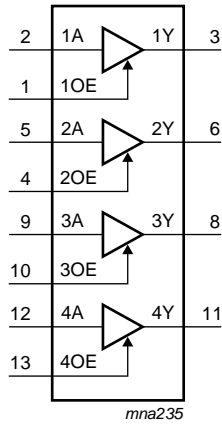


Fig 1. Logic symbol

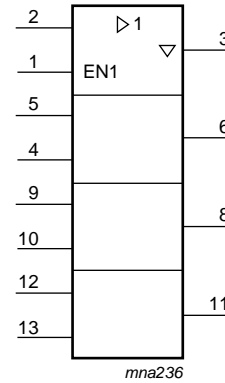


Fig 2. IEC logic symbol

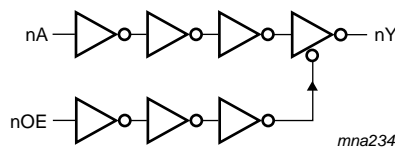


Fig 3. Logic diagram

## 5. Pinning information

### 5.1 Pinning

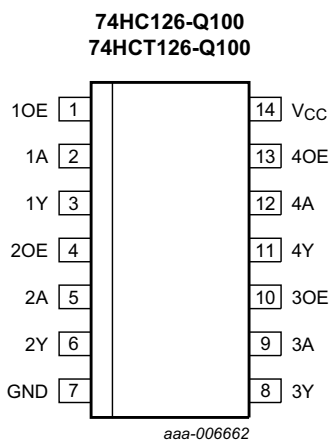


Fig 4. Pin configuration for SO14

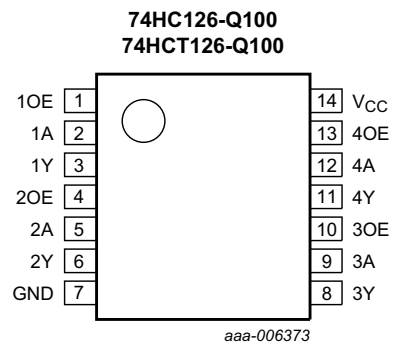


Fig 5. Pin configuration for TSSOP14

## 5.2 Pin description

Table 2. Pin description

| Symbol             | Pin          | Description                     |
|--------------------|--------------|---------------------------------|
| 1OE, 2OE, 3OE, 4OE | 1, 4, 10, 13 | data enable input (active HIGH) |
| 1A, 2A, 3A, 4A     | 2, 5, 9, 12  | data input                      |
| 1Y, 2Y, 3Y, 4Y     | 3, 6, 8, 11  | data output                     |
| GND                | 7            | ground (0 V)                    |
| V <sub>CC</sub>    | 14           | supply voltage                  |

## 6. Functional description

Table 3. Function selection<sup>[1]</sup>

| Inputs |    | Output |
|--------|----|--------|
| nOE    | nA | nY     |
| H      | L  | L      |
| H      | H  | H      |
| L      | X  | Z      |

[1] H = HIGH voltage level; L = LOW voltage level; X = don't care; Z = high-impedance OFF-state

## 7. Limiting values

Table 4. Limiting values

In accordance with the Absolute Maximum Rating System (IEC 60134). Voltages are referenced to GND (ground = 0 V).

| Symbol           | Parameter               | Conditions  | Min   | Max  | Unit |
|------------------|-------------------------|---|-------|------|------|
| V <sub>CC</sub>  | supply voltage          |   | -0.5  | +7   | V    |
| I <sub>IK</sub>  | input clamping current  | V <sub>I</sub> < -0.5 V or V <sub>I</sub> > V <sub>CC</sub> + 0.5 V | [1] - | ±20  | mA   |
| I <sub>OK</sub>  | output clamping current | V <sub>O</sub> < -0.5 V or V <sub>O</sub> > V <sub>CC</sub> + 0.5 V | [1] - | ±20  | mA   |
| I <sub>O</sub>   | output current          | -0.5 V < V <sub>O</sub> < V <sub>CC</sub> + 0.5 V                   | -     | ±35  | mA   |
| I <sub>CC</sub>  | supply current          |   | -     | 70   | mA   |
| I <sub>GND</sub> | ground current          |   | -70   | -    | mA   |
| T <sub>stg</sub> | storage temperature     |   | -65   | +150 | °C   |
| P <sub>tot</sub> | total power dissipation | SO14 and TSSOP14 packages   | [2] - | 500  | mW   |

[1] The input and output voltage ratings may be exceeded if the input and output current ratings are observed.

[2] For SO14 package: P<sub>tot</sub> derates linearly with 8 mW/K above 70 °C.  
For TSSOP14 packages: P<sub>tot</sub> derates linearly with 5.5 mW/K above 60 °C.

## 8. Recommended operating conditions

**Table 5. Recommended operating conditions**

Voltages are referenced to GND (ground = 0 V)

| Symbol           | Parameter                           | Conditions              | 74HC126-Q100 |      |                 | 74HCT126-Q100 |      |                 | Unit |
|------------------|-------------------------------------|-------------------------|--------------|------|-----------------|---------------|------|-----------------|------|
|                  |                                     |                         | Min          | Typ  | Max             | Min           | Typ  | Max             |      |
| V <sub>CC</sub>  | supply voltage                      |                         | 2.0          | 5.0  | 6.0             | 4.5           | 5.0  | 5.5             | V    |
| V <sub>I</sub>   | input voltage                       |                         | 0            | -    | V <sub>CC</sub> | 0             | -    | V <sub>CC</sub> | V    |
| V <sub>O</sub>   | output voltage                      |                         | 0            | -    | V <sub>CC</sub> | 0             | -    | V <sub>CC</sub> | V    |
| T <sub>amb</sub> | ambient temperature                 |                         | -40          | +25  | +125            | -40           | +25  | +125            | °C   |
| Δt/ΔV            | input transition rise and fall rate | V <sub>CC</sub> = 2.0 V | -            | -    | 625             | -             | -    | -               | ns/V |
|                  |                                     | V <sub>CC</sub> = 4.5 V | -            | 1.67 | 139             | -             | 1.67 | 139             | ns/V |
|                  |                                     | V <sub>CC</sub> = 6.0 V | -            | -    | 83              | -             | -    | -               | ns/V |

## 9. Static characteristics

**Table 6. Static characteristics**

At recommended operating conditions; voltages are referenced to GND (ground = 0 V).

| Symbol              | Parameter                 | Conditions   | T <sub>amb</sub> = 25 °C |      |      | T <sub>amb</sub> = -40 °C to +85 °C |      | T <sub>amb</sub> = -40 °C to +125 °C |      | Unit |
|---------------------|---------------------------|--|--------------------------|------|------|-------------------------------------|------|--------------------------------------|------|------|
|                     |                           |  | Min                      | Typ  | Max  | Min                                 | Max  | Min                                  | Max  |      |
| <b>74HC126-Q100</b> |                           |  |                          |      |      |                                     |      |                                      |      |      |
| V <sub>IH</sub>     | HIGH-level input voltage  | V <sub>CC</sub> = 2.0 V  | 1.5                      | 1.2  | -    | 1.5                                 | -    | 1.5                                  | -    | V    |
|                     |                           | V <sub>CC</sub> = 4.5 V  | 3.15                     | 2.4  | -    | 3.15                                | -    | 3.15                                 | -    | V    |
|                     |                           | V <sub>CC</sub> = 6.0 V  | 4.2                      | 3.2  | -    | 4.2                                 | -    | 4.2                                  | -    | V    |
| V <sub>IL</sub>     | LOW-level input voltage   | V <sub>CC</sub> = 2.0 V  | -                        | 0.8  | 0.5  | -                                   | 0.5  | -                                    | 0.5  | V    |
|                     |                           | V <sub>CC</sub> = 4.5 V  | -                        | 2.1  | 1.35 | -                                   | 1.35 | -                                    | 1.35 | V    |
|                     |                           | V <sub>CC</sub> = 6.0 V  | -                        | 2.8  | 1.8  | -                                   | 1.8  | -                                    | 1.8  | V    |
| V <sub>OH</sub>     | HIGH-level output voltage | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub>              |                          |      |      |                                     |      |                                      |      |      |
|                     |                           | I <sub>O</sub> = -20 μA; V <sub>CC</sub> = 2.0 V                 | 1.9                      | 2.0  | -    | 1.9                                 | -    | 1.9                                  | -    | V    |
|                     |                           | I <sub>O</sub> = -20 μA; V <sub>CC</sub> = 4.5 V                 | 4.4                      | 4.5  | -    | 4.4                                 | -    | 4.4                                  | -    | V    |
|                     |                           | I <sub>O</sub> = -20 μA; V <sub>CC</sub> = 6.0 V                 | 5.9                      | 6.0  | -    | 5.9                                 | -    | 5.9                                  | -    | V    |
|                     |                           | I <sub>O</sub> = -6.0 mA; V <sub>CC</sub> = 4.5 V                | 3.98                     | 4.32 | -    | 3.84                                | -    | 3.7                                  | -    | V    |
| V <sub>OL</sub>     | LOW-level output voltage  | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub>              |                          |      |      |                                     |      |                                      |      |      |
|                     |                           | I <sub>O</sub> = 20 μA; V <sub>CC</sub> = 2.0 V                  | -                        | 0    | 0.1  | -                                   | 0.1  | -                                    | 0.1  | V    |
|                     |                           | I <sub>O</sub> = 20 μA; V <sub>CC</sub> = 4.5 V                  | -                        | 0    | 0.1  | -                                   | 0.1  | -                                    | 0.1  | V    |
|                     |                           | I <sub>O</sub> = 20 μA; V <sub>CC</sub> = 6.0 V                  | -                        | 0    | 0.1  | -                                   | 0.1  | -                                    | 0.1  | V    |
|                     |                           | I <sub>O</sub> = 6.0 mA; V <sub>CC</sub> = 4.5 V                 | -                        | 0.15 | 0.26 | -                                   | 0.33 | -                                    | 0.4  | V    |
| I <sub>I</sub>      | input leakage current     | I <sub>O</sub> = 7.8 mA; V <sub>CC</sub> = 6.0 V                 | -                        | 0.16 | 0.26 | -                                   | 0.33 | -                                    | 0.4  | V    |
|                     |                           | V <sub>I</sub> = V <sub>CC</sub> or GND; V <sub>CC</sub> = 6.0 V | -                        | -    | ±0.1 | -                                   | ±1.0 | -                                    | ±1.0 | μA   |

**Table 6. Static characteristics ...continued**

At recommended operating conditions; voltages are referenced to GND (ground = 0 V).

| Symbol               | Parameter                 | Conditions  | T <sub>amb</sub> = 25 °C |      |      | T <sub>amb</sub> = -40 °C to +85 °C |      | T <sub>amb</sub> = -40 °C to +125 °C |      | Unit |
|----------------------|---------------------------|---|--------------------------|------|------|-------------------------------------|------|--------------------------------------|------|------|
|                      |                           |   | Min                      | Typ  | Max  | Min                                 | Max  | Min                                  | Max  |      |
| I <sub>OZ</sub>      | OFF-state output current  | per input pin; V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub> ; V <sub>O</sub> = V <sub>CC</sub> or GND; other inputs at V <sub>CC</sub> or GND; V <sub>CC</sub> = 6.0 V; I <sub>O</sub> = 0 A | -                        | ±0.5 | -    | ±5.0                                | -    | ±10                                  | -    | µA   |
| I <sub>CC</sub>      | supply current            | V <sub>I</sub> = V <sub>CC</sub> or GND; I <sub>O</sub> = 0 A; V <sub>CC</sub> = 6.0 V  | -                        | -    | 8.0  | -                                   | 80   | -                                    | 160  | µA   |
| C <sub>I</sub>       | input capacitance         |   | -                        | 3.5  | -    | -                                   | -    | -                                    | -    | pF   |
| <b>74HCT126-Q100</b> |                           |   |                          |      |      |                                     |      |                                      |      |      |
| V <sub>IH</sub>      | HIGH-level input voltage  | V <sub>CC</sub> = 4.5 V to 5.5 V  | 2.0                      | 1.6  | -    | 2.0                                 | -    | 2.0                                  | -    | V    |
| V <sub>IL</sub>      | LOW-level input voltage   | V <sub>CC</sub> = 4.5 V to 5.5 V  | -                        | 1.2  | 0.8  | -                                   | 0.8  | -                                    | 0.8  | V    |
| V <sub>OH</sub>      | HIGH-level output voltage | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub> ; V <sub>CC</sub> = 4.5 V   |                          |      |      |                                     |      |                                      |      |      |
|                      |                           | I <sub>O</sub> = -20 µA   | 4.4                      | 4.5  | -    | 4.4                                 | -    | 4.4                                  | -    | V    |
|                      |                           | I <sub>O</sub> = -6.0 mA  | 3.98                     | 4.32 | -    | 3.84                                | -    | 3.7                                  | -    | V    |
| V <sub>OL</sub>      | LOW-level output voltage  | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub> ; V <sub>CC</sub> = 4.5 V   |                          |      |      |                                     |      |                                      |      |      |
|                      |                           | I <sub>O</sub> = 20 µA;   | -                        | 0    | 0.1  | -                                   | 0.1  | -                                    | 0.1  | V    |
|                      |                           | I <sub>O</sub> = 6.0 mA;  | -                        | 0.16 | 0.26 | -                                   | 0.33 | -                                    | 0.4  | V    |
| I <sub>I</sub>       | input leakage current     | V <sub>I</sub> = V <sub>CC</sub> or GND; V <sub>CC</sub> = 5.5 V  | -                        | -    | ±0.1 | -                                   | ±1.0 | -                                    | ±1.0 | µA   |
| I <sub>OZ</sub>      | OFF-state output current  | per input pin; V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub> ; V <sub>O</sub> = V <sub>CC</sub> or GND; other inputs at V <sub>CC</sub> or GND; V <sub>CC</sub> = 5.5 V; I <sub>O</sub> = 0 A | -                        | -    | ±0.5 | -                                   | ±5.0 | -                                    | ±10  | µA   |
| I <sub>CC</sub>      | supply current            | V <sub>I</sub> = V <sub>CC</sub> or GND; I <sub>O</sub> = 0 A; V <sub>CC</sub> = 5.5 V  | -                        | -    | 8.0  | -                                   | 80   | -                                    | 160  | µA   |
| ΔI <sub>CC</sub>     | additional supply current | per input pin; I <sub>O</sub> = 0 A; V <sub>I</sub> = V <sub>CC</sub> - 2.1 V; other inputs at V <sub>CC</sub> or GND; V <sub>CC</sub> = 4.5 V to 5.5 V   |                          |      |      |                                     |      |                                      |      |      |
|                      |                           | nA, nOE inputs  | -                        | 100  | 360  | -                                   | 450  | -                                    | 490  | µA   |
| C <sub>I</sub>       | input capacitance         |   | -                        | 3.5  | -    | -                                   | -    | -                                    | -    | pF   |

## 10. Dynamic characteristics

**Table 7. Dynamic characteristics**
*GND = 0 V; C<sub>L</sub> = 50 pF; for test circuit see [Figure 8](#).*

| Symbol               | Parameter                     | Conditions  | T <sub>amb</sub> = 25 °C |     |     | T <sub>amb</sub> = -40 °C to +125 °C |              | Unit |
|----------------------|-------------------------------|---|--------------------------|-----|-----|--------------------------------------|--------------|------|
|                      |                               |   | Min                      | Typ | Max | Max (85 °C)                          | Max (125 °C) |      |
| <b>74HC126-Q100</b>  |                               |   |                          |     |     |                                      |              |      |
| t <sub>pd</sub>      | propagation delay             | nA to nY; see <a href="#">Figure 6</a> <a href="#">[1]</a>                |                          |     |     |                                      |              |      |
|                      |                               | V <sub>CC</sub> = 2.0 V   | -                        | 30  | 100 | 125                                  | 150          | ns   |
|                      |                               | V <sub>CC</sub> = 4.5 V   | -                        | 11  | 20  | 25                                   | 30           | ns   |
|                      |                               | V <sub>CC</sub> = 5.0 V; C <sub>L</sub> = 15 pF                           | -                        | 9   | -   | -                                    | -            | ns   |
|                      |                               | V <sub>CC</sub> = 6.0 V   | -                        | 9   | 17  | 21                                   | 26           | ns   |
| t <sub>en</sub>      | enable time                   | nOE to nY; see <a href="#">Figure 7</a> <a href="#">[1]</a>               |                          |     |     |                                      |              |      |
|                      |                               | V <sub>CC</sub> = 2.0 V   | -                        | 41  | 125 | 155                                  | 190          | ns   |
|                      |                               | V <sub>CC</sub> = 4.5 V   | -                        | 15  | 25  | 31                                   | 38           | ns   |
|                      |                               | V <sub>CC</sub> = 6.0 V   | -                        | 12  | 21  | 26                                   | 32           | ns   |
| t <sub>dis</sub>     | disable time                  | nOE to nY; see <a href="#">Figure 7</a> <a href="#">[1]</a>               |                          |     |     |                                      |              |      |
|                      |                               | V <sub>CC</sub> = 2.0 V   | -                        | 41  | 125 | 155                                  | 190          | ns   |
|                      |                               | V <sub>CC</sub> = 4.5 V   | -                        | 15  | 25  | 31                                   | 38           | ns   |
|                      |                               | V <sub>CC</sub> = 6.0 V   | -                        | 12  | 21  | 26                                   | 32           | ns   |
| t <sub>t</sub>       | transition time               | see <a href="#">Figure 6</a> <a href="#">[1]</a>                          |                          |     |     |                                      |              |      |
|                      |                               | V <sub>CC</sub> = 2.0 V   | -                        | 14  | 60  | 75                                   | 90           | ns   |
|                      |                               | V <sub>CC</sub> = 4.5 V   | -                        | 5   | 12  | 15                                   | 18           | ns   |
|                      |                               | V <sub>CC</sub> = 6.0 V   | -                        | 4   | 10  | 13                                   | 15           | ns   |
| C <sub>PD</sub>      | power dissipation capacitance | per package; V <sub>I</sub> = GND to V <sub>CC</sub> <a href="#">[2]</a>  | -                        | 23  | -   | -                                    | -            | pF   |
| <b>74HCT126-Q100</b> |                               |   |                          |     |     |                                      |              |      |
| t <sub>pd</sub>      | propagation delay             | nA to nY; see <a href="#">Figure 6</a> <a href="#">[1]</a>                |                          |     |     |                                      |              |      |
|                      |                               | V <sub>CC</sub> = 4.5 V   | -                        | 14  | 24  | 30                                   | 36           | ns   |
|                      |                               | V <sub>CC</sub> = 5.0 V; C <sub>L</sub> = 15 pF                           | -                        | 11  | -   | -                                    | -            | ns   |
| t <sub>en</sub>      | enable time                   | nOE to nY; see <a href="#">Figure 7</a> <a href="#">[1]</a>               |                          |     |     |                                      |              |      |
|                      |                               | V <sub>CC</sub> = 4.5 V   | -                        | 13  | 25  | 31                                   | 38           | ns   |
| t <sub>dis</sub>     | disable time                  | nOE to nY; see <a href="#">Figure 7</a> <a href="#">[1]</a>               |                          |     |     |                                      |              |      |
|                      |                               | V <sub>CC</sub> = 4.5 V   | -                        | 18  | 28  | 35                                   | 42           | ns   |
| t <sub>t</sub>       | transition time               | V <sub>CC</sub> = 4.5 V; see <a href="#">Figure 6</a> <a href="#">[1]</a> | -                        | 5   | 12  | 15                                   | 18           | ns   |

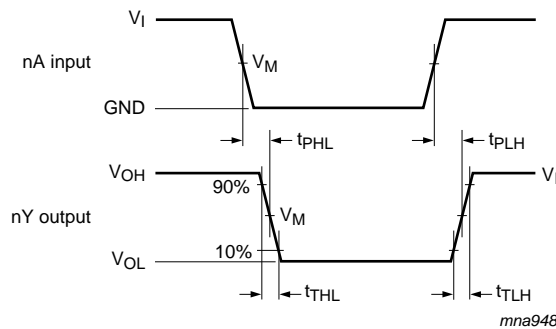
**Table 7. Dynamic characteristics**

$GND = 0\text{ V}$ ;  $C_L = 50\text{ pF}$ ; for test circuit see [Figure 8](#).

| Symbol   | Parameter                     | Conditions  | $T_{amb} = 25\text{ °C}$ |     |     | $T_{amb} = -40\text{ °C to }+125\text{ °C}$ |              | Unit |    |
|----------|-------------------------------|---|--------------------------|-----|-----|---|--------------|------|----|
|          |                               |   | Min                      | Typ | Max | Max (85 °C)                                 | Max (125 °C) |      |    |
| $C_{PD}$ | power dissipation capacitance | per package;<br>$V_I = GND\text{ to }V_{CC} - 1.5\text{ V}$ | 2                        | -   | 24  | -   | -            | -    | pF |

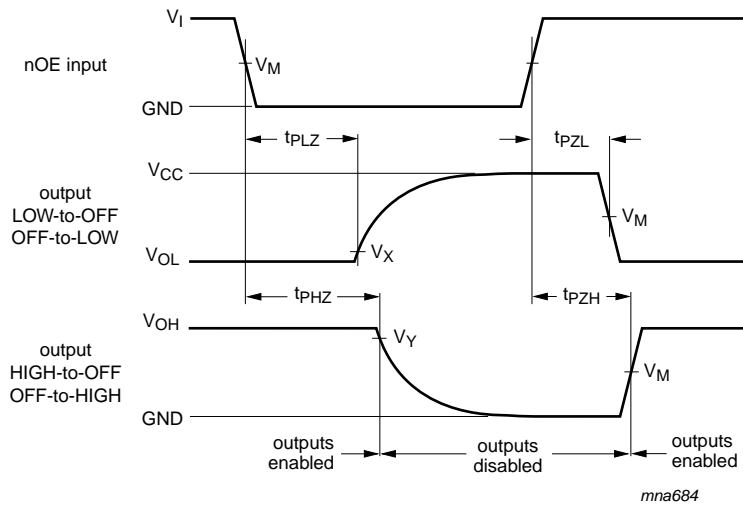
- [1]  $t_{pd}$  is the same as  $t_{PLH}$  and  $t_{PHL}$ .  
 $t_{en}$  is the same as  $t_{PZL}$  and  $t_{PZH}$ .  
 $t_{dis}$  is the same as  $t_{PLZ}$  and  $t_{PHZ}$ .  
 $t_t$  is the same as  $t_{THL}$  and  $t_{TLH}$ .
- [2]  $C_{PD}$  is used to determine the dynamic power dissipation ( $P_D$  in  $\mu\text{W}$ ):  
 $P_D = C_{PD} \times V_{CC}^2 \times f_i \times N + \sum (C_L \times V_{CC}^2 \times f_o)$  where:  
 $f_i$  = input frequency in MHz;  
 $f_o$  = output frequency in MHz;  
 $C_L$  = output load capacitance in pF;  
 $V_{CC}$  = supply voltage in V;  
 $N$  = number of inputs switching;  
 $\sum (C_L \times V_{CC}^2 \times f_o)$  = sum of outputs.

## 11. Waveforms



Measurement points are given in [Table 8](#).  
 $V_{OL}$  and  $V_{OH}$  are typical voltage output levels that occur with the output load.

**Fig 6. Input to output propagation delays**



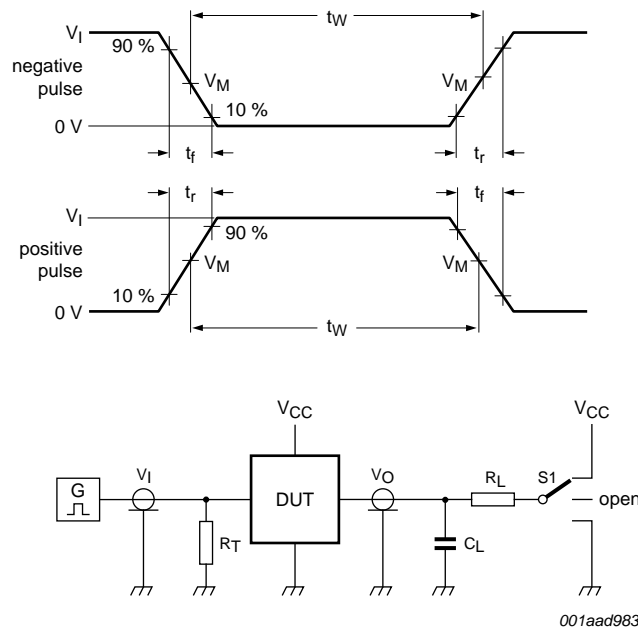
Measurement points are given in [Table 8](#).  
 $V_{OL}$  and  $V_{OH}$  are typical voltage output levels that occur with the output load.

**Fig 7. 3-state enable and disable times**

**Table 8. Measurement points**

| Type          | Input       | Output      |             |             |
|---------------|-------------|-------------|-------------|-------------|
|               | $V_M$       | $V_M$       | $V_X$       | $V_Y$       |
| 74HC126-Q100  | $0.5V_{CC}$ | $0.5V_{CC}$ | $0.1V_{CC}$ | $0.9V_{CC}$ |
| 74HCT126-Q100 | 1.3 V       | 1.3 V       | $0.1V_{CC}$ | $0.9V_{CC}$ |





Test data is given in [Table 9](#).

Definitions test circuit:

$R_T$  = Termination resistance should be equal to output impedance  $Z_o$  of the pulse generator

$C_L$  = Load capacitance including jig and probe capacitance

$R_L$  = Load resistance

S1 = Test selection switch

**Fig 8. Test circuit for measuring switching times**

**Table 9. Test data**

| Type          | Input    |            | Load         |              | S1 position        |                    |                    |
|---------------|----------|------------|--------------|--------------|--------------------|--------------------|--------------------|
|               | $V_I$    | $t_r, t_f$ | $C_L$        | $R_L$        | $t_{PHL}, t_{PLH}$ | $t_{PZH}, t_{PHZ}$ | $t_{PZL}, t_{PLZ}$ |
| 74HC126-Q100  | $V_{CC}$ | 6 ns       | 15 pF, 50 pF | 1 k $\Omega$ | open               | GND                | $V_{CC}$           |
| 74HCT126-Q100 | 3 V      | 6 ns       | 15 pF, 50 pF | 1 k $\Omega$ | open               | GND                | $V_{CC}$           |

12. Package outline

SO14: plastic small outline package; 14 leads; body width 3.9 mm

SOT108-1

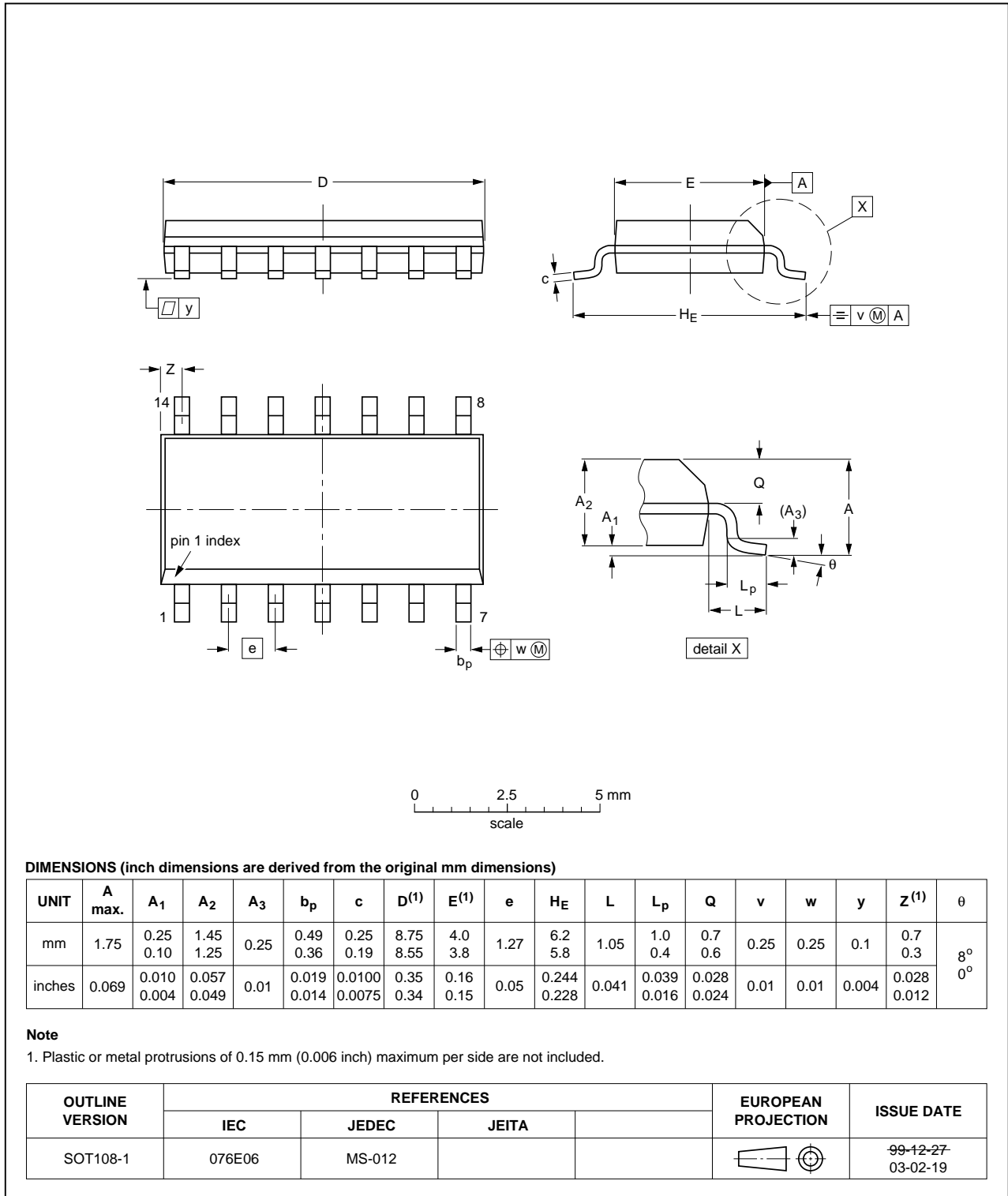


Fig 9. Package outline SOT108-1 (SO14)

TSSOP14: plastic thin shrink small outline package; 14 leads; body width 4.4 mm

SOT402-1

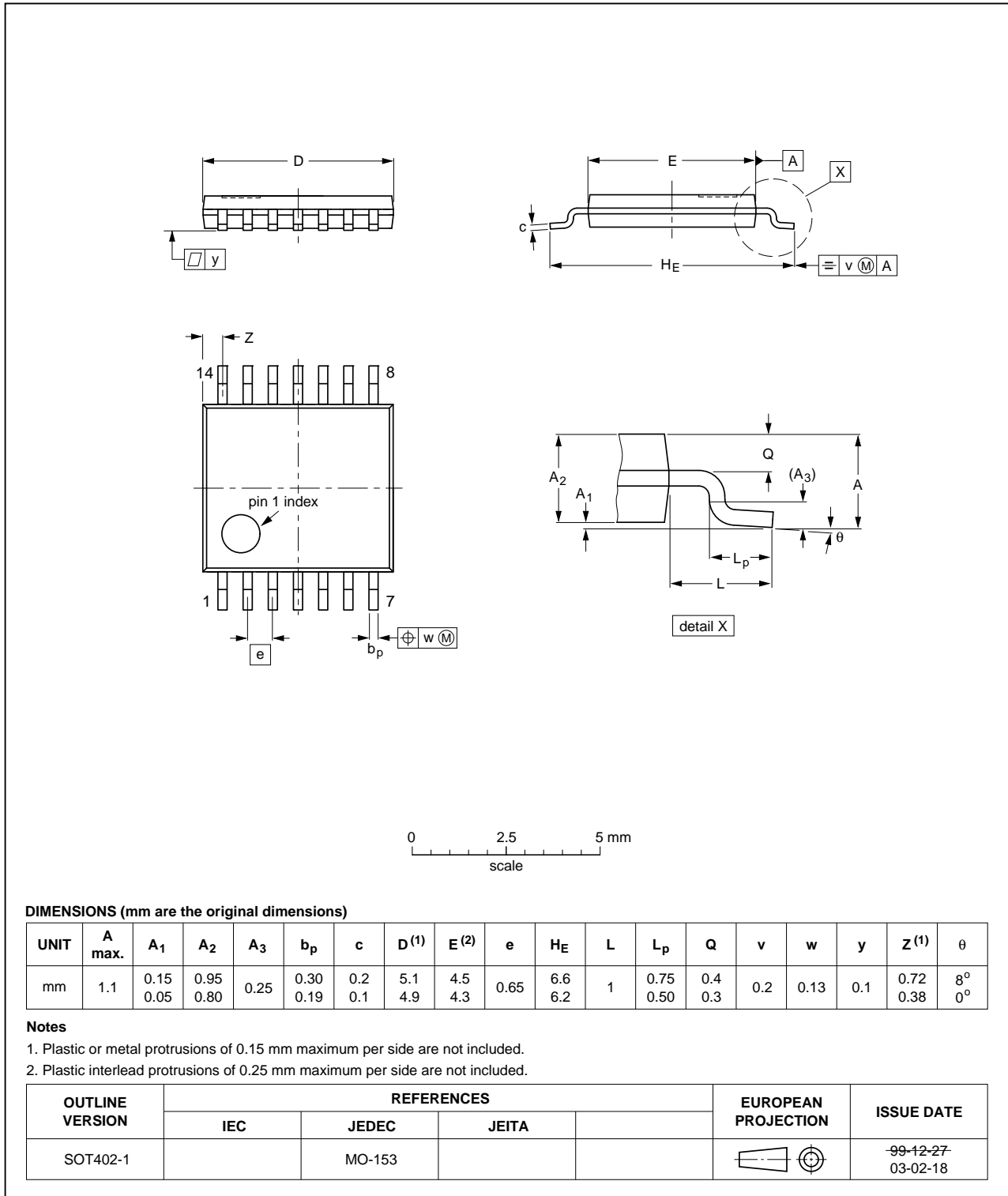


Fig 10. Package outline SOT402-1 (TSSOP14)

## 13. Abbreviations

Table 10. Abbreviations

| Acronym | Description                                    |
|---------|--|
| CMOS    | Complementary Metal-Oxide Semiconductor        |
| DUT     | Device Under Test                              |
| ESD     | ElectroStatic Discharge                        |
| HBM     | Human Body Model                               |
| LSTTL   | Low-power Schottky Transistor-Transistor Logic |
| MIL     | Military                                       |
| MM      | Machine Model                                  |

## 14. Revision history

Table 11. Revision history

| Document ID          | Release date | Data sheet status  | Change notice | Supersedes |
|----------------------|--------------|--------------------|---------------|------------|
| 74HC_HCT126_Q100 v.1 | 20130320     | Product data sheet | -             | -          |

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### 15.1 Data sheet status

| Document status <sup>[1][2]</sup> | Product status <sup>[3]</sup> | Definition  |
|-----------------------------------|-------------------------------|---|
| Objective [short] data sheet      | Development                   | This document contains data from the objective specification for product development. |
| Preliminary [short] data sheet    | Qualification                 | This document contains data from the preliminary specification.                       |
| Product [short] data sheet        | Production                    | This document contains the product specification.                                     |

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[2] The term 'short data sheet' is explained in section "Definitions".

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