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# 74HC153; 74HCT153

## Dual 4-input multiplexer

Rev. 6 — 11 May 2016

Product data sheet

## 1. General description

The 74HC153; 74HCT153 is a dual 4-input multiplexer. The device features independent enable inputs ( $n\bar{E}$ ) and common data select inputs (S0 and S1). For each multiplexer, the select inputs select one of the four binary inputs and routes it to the multiplexer output ( $nY$ ). A HIGH on  $\bar{E}$  forces the corresponding multiplexer outputs LOW. Inputs include clamp diodes. This enables the use of current limiting resistors to interface inputs to voltages in excess of  $V_{CC}$ .

## 2. Features and benefits

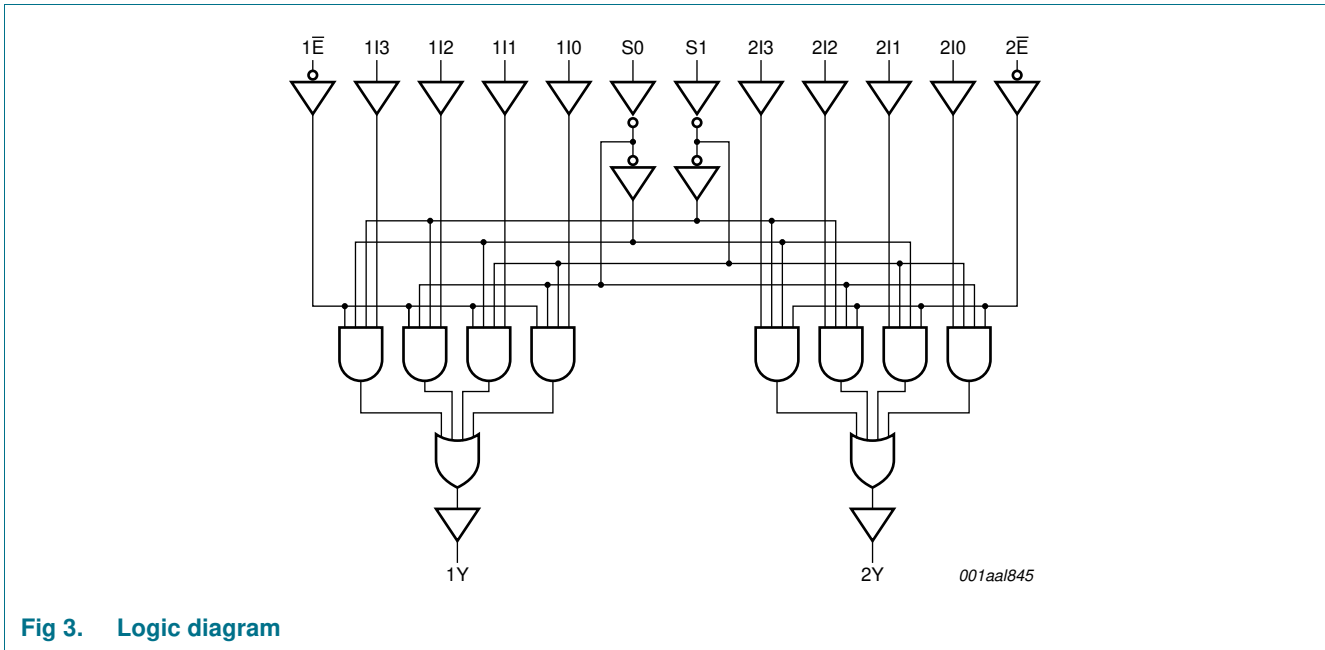
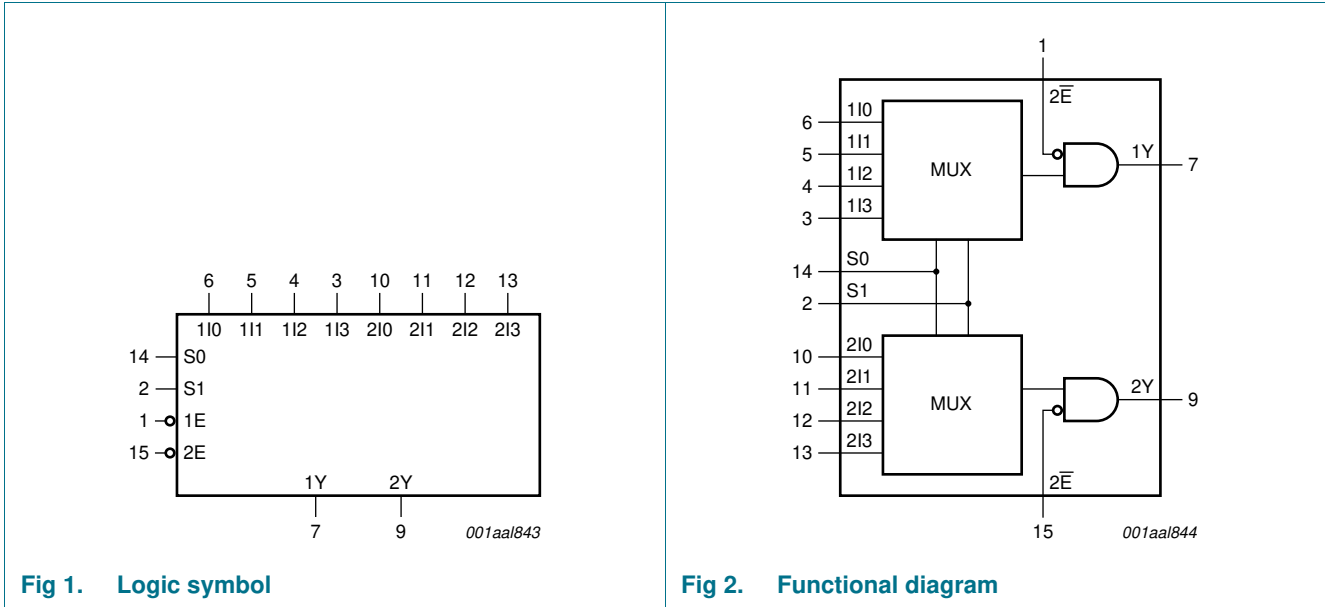
- Input levels:
  - ◆ For 74HC153: CMOS level
  - ◆ For 74HCT153: TTL level
- Non-inverting outputs
- Separate enable input for each output
- Common select inputs
- Complies with JEDEC standard no. 7A
- Permits multiplexing from n lines to 1 line
- Enable line provided for cascading (n lines to 1 line)
- ESD protection:
  - ◆ HBM JESD22-A114F exceeds 2000 V
  - ◆ MM JESD22-A115-A exceeds 200 V
- Multiple package options
- Specified from  $-40\text{ °C}$  to  $+85\text{ °C}$  and  $-40\text{ °C}$  to  $+125\text{ °C}$ .

## 3. Ordering information

Table 1. Ordering information

| Type number | Package           |         |  |          |
|-------------|-------------------|---------|--|----------|
|             | Temperature range | Name    | Description  | Version  |
| 74HC153D    | -40 °C to +125 °C | SO16    | plastic small outline package; 16 leads; body width 3.9 mm             | SOT109-1 |
| 74HCT153D   |                   |         |  |          |
| 74HC153DB   | -40 °C to +125 °C | SSOP16  | plastic shrink small outline package; 16 leads; body width 5.3 mm      | SOT338-1 |
| 74HCT153DB  |                   |         |  |          |
| 74HC153PW   | -40 °C to +125 °C | TSSOP16 | plastic thin shrink small outline package; 16 leads; body width 4.4 mm | SOT403-1 |
| 74HCT153PW  |                   |         |  |          |

## 4. Functional diagram



## 5. Pinning information

### 5.1 Pinning

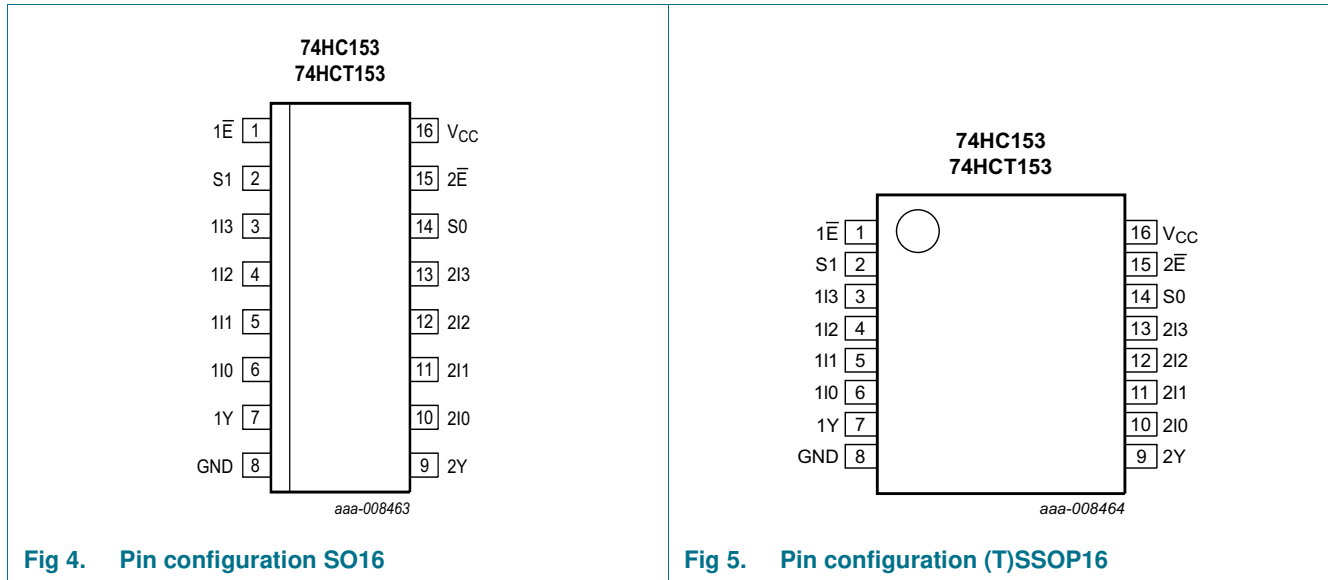


Fig 4. Pin configuration SO16

Fig 5. Pin configuration (T)SSOP16

### 5.2 Pin description

Table 2. Pin description

| Symbol             | Pin            | Description                       |
|--------------------|----------------|-----------------------------------|
| 1E, 2E             | 1, 15          | output enable inputs (active LOW) |
| S0, S1             | 14, 2          | data select inputs                |
| 1I0, 1I1, 1I2, 1I3 | 6, 5, 4, 3     | data inputs source 1              |
| 1Y                 | 7              | multiplexer output source 1       |
| GND                | 8              | ground (0 V)                      |
| 2Y                 | 9              | multiplexer output source 2       |
| 2I0, 2I1, 2I2, 2I3 | 10, 11, 12, 13 | data inputs source 2              |
| V <sub>CC</sub>    | 16             | supply voltage                    |

## 6. Functional description

**Table 3. Function table**

H = HIGH voltage level; L = LOW voltage level; X = don't care.

| select inputs |    | data inputs |     |     |     | output enable | output |
|---------------|----|-------------|-----|-----|-----|---------------|--------|
| S0            | S1 | nI0         | nI1 | nI2 | nI3 | nE            | nY     |
| X             | X  | X           | X   | X   | X   | H             | L      |
| L             | L  | L           | X   | X   | X   | L             | L      |
| L             | L  | H           | X   | X   | X   | L             | H      |
| H             | L  | X           | L   | X   | X   | L             | L      |
| H             | L  | X           | H   | X   | X   | L             | H      |
| L             | H  | X           | X   | L   | X   | L             | L      |
| L             | H  | X           | X   | H   | X   | L             | H      |
| H             | H  | X           | X   | X   | L   | L             | L      |
| H             | H  | X           | X   | X   | H   | L             | H      |

## 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 |
|-----------|-------------------------|--|------|----------|------|
| $V_{CC}$  | supply voltage          |  | -0.5 | +7       | V    |
| $I_{IK}$  | input clamping current  | $V_I < -0.5\text{ V}$ or $V_I > V_{CC} + 0.5\text{ V}$ [1] | -    | $\pm 20$ | mA   |
| $I_{OK}$  | output clamping current | $V_O < -0.5\text{ V}$ or $V_O > V_{CC} + 0.5\text{ V}$ [1] | -    | $\pm 20$ | mA   |
| $I_O$     | output current          | $-0.5\text{ V} < V_O < V_{CC} + 0.5\text{ V}$              | -    | $\pm 25$ | mA   |
| $I_{CC}$  | supply current          |  | -    | 50       | mA   |
| $I_{GND}$ | ground current          |  | -50  | -        | mA   |
| $T_{stg}$ | storage temperature     |  | -65  | +150     | °C   |
| $P_{tot}$ | total power dissipation | SO16 and (T)SSOP16 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 SO16 package:  $P_{tot}$  derates linearly with 8 mW/K above 70 °C.

For (T)SSOP16 packages:  $P_{tot}$  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              | 74HC153 |      |                 | 74HCT153 |      |                 | 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   | 25 °C |      |      | -40 °C to +85 °C |      | -40 °C to +125 °C |      | Unit |
|-----------------|---------------------------|--|-------|------|------|------------------|------|-------------------|------|------|
|                 |                           |  | Min   | Typ  | Max  | Min              | Max  | Min               | Max  |      |
| <b>74HC153</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> = -4.0 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> = 4.0 mA; V <sub>CC</sub> = 4.5 V                                       | -     | 0.15 | 0.26 | -                | 0.33 | -                 | 0.4  | V    |
| I <sub>l</sub>  | input leakage current     | V <sub>I</sub> = V <sub>CC</sub> or GND; V <sub>CC</sub> = 6.0 V                       | -     | -    | ±0.1 | -                | ±1   | -                 | ±1   | μA   |
|                 |                           | 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   |

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

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

| Symbol           | Parameter                 | Conditions   | 25 °C |      |      | -40 °C to +85 °C |      | -40 °C to +125 °C |     | Unit |
|------------------|---------------------------|--|-------|------|------|------------------|------|-------------------|-----|------|
|                  |                           |  | Min   | Typ  | Max  | Min              | Max  | Min               | Max |      |
| C <sub>I</sub>   | input capacitance         |  | -     | 3.5  | -    | -                | -    | -                 | -   | pF   |
| <b>74HCT153</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> = -4.0 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; V <sub>CC</sub> = 4.5 V  | -     | 0    | 0.1  | -                | 0.1  | -                 | 0.1 | V    |
|                  |                           | I <sub>O</sub> = 5.2 mA; V <sub>CC</sub> = 6.0 V   | -     | 0.15 | 0.26 | -                | 0.33 | -                 | 0.4 | V    |
| I <sub>I</sub>   | input leakage current     | V <sub>I</sub> = V <sub>CC</sub> or GND;<br>V <sub>CC</sub> = 5.5 V  | -     | -    | ±0.1 | -                | ±1   | -                 | ±1  | µA   |
| I <sub>CC</sub>  | supply current            | V <sub>I</sub> = V <sub>CC</sub> or GND; I <sub>O</sub> = 0 A;<br>V <sub>CC</sub> = 5.5 V  | -     | -    | 8    | -                | 80   | -                 | 160 | µA   |
| ΔI <sub>CC</sub> | additional supply current | per input pin;<br>V <sub>I</sub> = V <sub>CC</sub> - 2.1 V; I <sub>O</sub> = 0 A;<br>other inputs at V <sub>CC</sub> or GND;<br>V <sub>CC</sub> = 4.5 V to 5.5 V |       |      |      |                  |      |                   |     |      |
|                  |                           | 1In, 2In   | -     | 45   | 162  | -                | 203  | -                 | 221 | µA   |
|                  |                           | n $\bar{E}$  | -     | 60   | 216  | -                | 270  | -                 | 294 | µA   |
|                  |                           | Sn   | -     | 135  | 486  | -                | 608  | -                 | 662 | µA   |
| C <sub>I</sub>   | input capacitance         |  | -     | 3.5  | -    | -                | -    | -                 | -   | pF   |

## 10. Dynamic characteristics

**Table 7. Dynamic characteristics**
*GND = 0 V;  $t_r = t_f = 6$  ns;  $C_L = 50$  pF; for test circuit, see [Figure 8](#); unless otherwise specified*

| Symbol                          | Parameter                     | Conditions  | 25 °C |     |     | -40 °C to +85 °C |     | -40 °C to +125 °C |     | Unit |
|---------------------------------|-------------------------------|---|-------|-----|-----|------------------|-----|-------------------|-----|------|
|                                 |                               |   | Min   | Typ | Max | Min              | Max | Min               | Max |      |
| <b>74HC153</b>                  |                               |   |       |     |     |                  |     |                   |     |      |
| $t_{pd}$                        | propagation delay             | 1In to nY, 2In to nY; see <a href="#">Figure 6</a> <sup>[1]</sup> |       |     |     |                  |     |                   |     |      |
|                                 |                               | $V_{CC} = 2.0$ V  | -     | 47  | 145 | -                | 180 | -                 | 220 | ns   |
|                                 |                               | $V_{CC} = 4.5$ V  | -     | 17  | 29  | -                | 36  | -                 | 44  | ns   |
|                                 |                               | $V_{CC} = 5.0$ V; $C_L = 15$ pF                                   | -     | 14  | -   | -                | -   | -                 | -   | ns   |
|                                 |                               | $V_{CC} = 6.0$ V  | -     | 14  | 25  | -                | 31  | -                 | 38  | ns   |
|                                 |                               | Sn to nY; see <a href="#">Figure 7</a>                            |       |     |     |                  |     |                   |     |      |
|                                 |                               | $V_{CC} = 2.0$ V  | -     | 50  | 150 | -                | 190 | -                 | 225 | ns   |
|                                 |                               | $V_{CC} = 4.5$ V  | -     | 18  | 30  | -                | 38  | -                 | 45  | ns   |
|                                 |                               | $V_{CC} = 5.0$ V; $C_L = 15$ pF                                   | -     | 15  | -   | -                | -   | -                 | -   | ns   |
|                                 |                               | $V_{CC} = 6.0$ V  | -     | 14  | 26  | -                | 33  | -                 | 38  | ns   |
|                                 |                               | n $\bar{E}$ to nY; see <a href="#">Figure 7</a>                   |       |     |     |                  |     |                   |     |      |
|                                 |                               | $V_{CC} = 2.0$ V  | -     | 33  | 100 | -                | 125 | -                 | 150 | ns   |
|                                 |                               | $V_{CC} = 4.5$ V  | -     | 12  | 20  | -                | 25  | -                 | 30  | ns   |
| $V_{CC} = 5.0$ V; $C_L = 15$ pF | -                             | 10  | -     | -   | -   | -                | -   | ns                |     |      |
| $V_{CC} = 6.0$ V                | -                             | 10  | 17    | -   | 21  | -                | 26  | ns                |     |      |
| $t_t$                           | transition time               | see <a href="#">Figure 6</a> <sup>[2]</sup>                       |       |     |     |                  |     |                   |     |      |
|                                 |                               | $V_{CC} = 2.0$ V  | -     | 19  | 75  | -                | 95  | -                 | 110 | ns   |
|                                 |                               | $V_{CC} = 4.5$ V  | -     | 7   | 15  | -                | 19  | -                 | 22  | ns   |
|                                 |                               | $V_{CC} = 6.0$ V  | -     | 6   | 13  | -                | 16  | -                 | 19  | ns   |
| $C_{PD}$                        | power dissipation capacitance | per package; $V_I = \text{GND to } V_{CC}$ <sup>[3]</sup>         | -     | 30  | -   | -                | -   | -                 | pF  |      |
| <b>74HCT153</b>                 |                               |   |       |     |     |                  |     |                   |     |      |
| $t_{PHL}$                       | HIGH to LOW propagation delay | 1In to nY, 2In to nY; see <a href="#">Figure 6</a> <sup>[1]</sup> |       |     |     |                  |     |                   |     |      |
|                                 |                               | $V_{CC} = 4.5$ V  | -     | 19  | 34  | -                | 43  | -                 | 51  | ns   |
|                                 |                               | $V_{CC} = 5.0$ V; $C_L = 15$ pF                                   | -     | 16  | -   | -                | -   | -                 | -   | ns   |
| $t_{PLH}$                       | LOW to HIGH propagation delay | 1In to nY, 2In to nY; see <a href="#">Figure 6</a> <sup>[1]</sup> |       |     |     |                  |     |                   |     |      |
|                                 |                               | $V_{CC} = 4.5$ V  | -     | 13  | 24  | -                | 30  | -                 | 36  | ns   |
|                                 |                               | $V_{CC} = 5.0$ V; $C_L = 15$ pF                                   | -     | 16  | -   | -                | -   | -                 | -   | ns   |

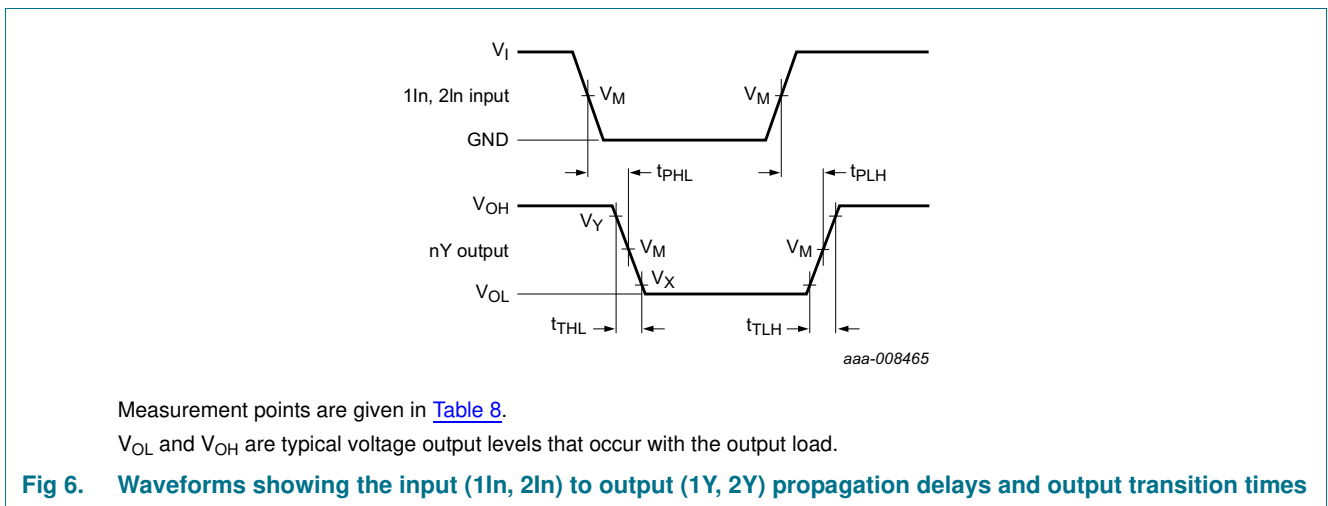


**Table 7. Dynamic characteristics ...continued**

$GND = 0\text{ V}$ ;  $t_r = t_f = 6\text{ ns}$ ;  $C_L = 50\text{ pF}$ ; for test circuit, see [Figure 8](#); unless otherwise specified

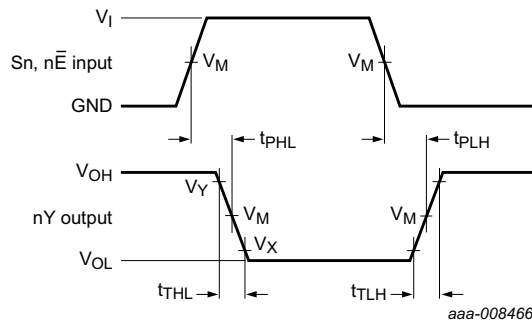
| Symbol   | Parameter                     | Conditions   | 25 °C |     |     | −40 °C to +85 °C |     | −40 °C to +125 °C |     | Unit |
|----------|-------------------------------|--|-------|-----|-----|------------------|-----|-------------------|-----|------|
|          |                               |  | Min   | Typ | Max | Min              | Max | Min               | Max |      |
| $t_{pd}$ | propagation delay             | Sn to nY; see <a href="#">Figure 7</a> [1]                   |       |     |     |                  |     |                   |     |      |
|          |                               | $V_{CC} = 4.5\text{ V}$                                      | -     | 20  | 34  | -                | 43  | -                 | 51  | ns   |
|          |                               | $V_{CC} = 5.0\text{ V}$ ; $C_L = 15\text{ pF}$               | -     | 17  | -   | -                | -   | -                 | -   | ns   |
|          |                               | n $\bar{E}$ to nY; see <a href="#">Figure 7</a> [1]          |       |     |     |                  |     |                   |     |      |
|          |                               | $V_{CC} = 4.5\text{ V}$                                      | -     | 14  | 27  | -                | 34  | -                 | 41  | ns   |
|          |                               | $V_{CC} = 5.0\text{ V}$ ; $C_L = 15\text{ pF}$               | -     | 11  | -   | -                | -   | -                 | ns  |      |
| $t_t$    | transition time               | see <a href="#">Figure 6</a> [2]                             |       |     |     |                  |     |                   |     |      |
|          |                               | $V_{CC} = 4.5\text{ V}$                                      | -     | 7   | 15  | -                | 19  | -                 | 22  | ns   |
| $C_{PD}$ | power dissipation capacitance | per package; $V_I = GND\text{ to }V_{CC} - 1.5\text{ V}$ [3] | -     | 30  | -   | -                | -   | -                 | -   | pF   |

- [1]  $t_{pd}$  is the same as  $t_{PHL}$  and  $t_{PLH}$ .
- [2]  $t_t$  is the same as  $t_{THL}$  and  $t_{TLH}$ .
- [3]  $C_{PD}$  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.



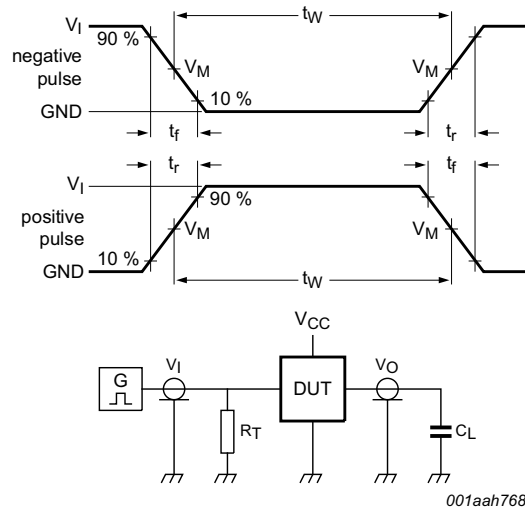
**Table 8. Measurement points**

| Type     | Input       | Output      |             |             |
|----------|-------------|-------------|-------------|-------------|
|          | $V_M$       | $V_M$       | $V_X$       | $V_Y$       |
| 74HC153  | $0.5V_{CC}$ | $0.5V_{CC}$ | $0.1V_{CC}$ | $0.9V_{CC}$ |
| 74HCT153 | 1.3 V       | 1.3 V       | $0.1V_{CC}$ | $0.9V_{CC}$ |



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. Waveforms showing the input ( $S_n, n\bar{E}$ ) to output ( $nY$ ) propagation delays**



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.

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

**Table 9. Test data**

| Type     | Input    |            | Load         | Test               |
|----------|----------|------------|--------------|--------------------|
|          | $V_I$    | $t_r, t_f$ | $C_L$        |                    |
| 74HC153  | $V_{CC}$ | 6.0 ns     | 15 pF, 50 pF | $t_{PLH}, t_{PHL}$ |
| 74HCT153 | 3.0 V    | 6.0 ns     | 15 pF, 50 pF | $t_{PLH}, t_{PHL}$ |

## 11. Package outline

SO16: plastic small outline package; 16 leads; body width 3.9 mm

SOT109-1

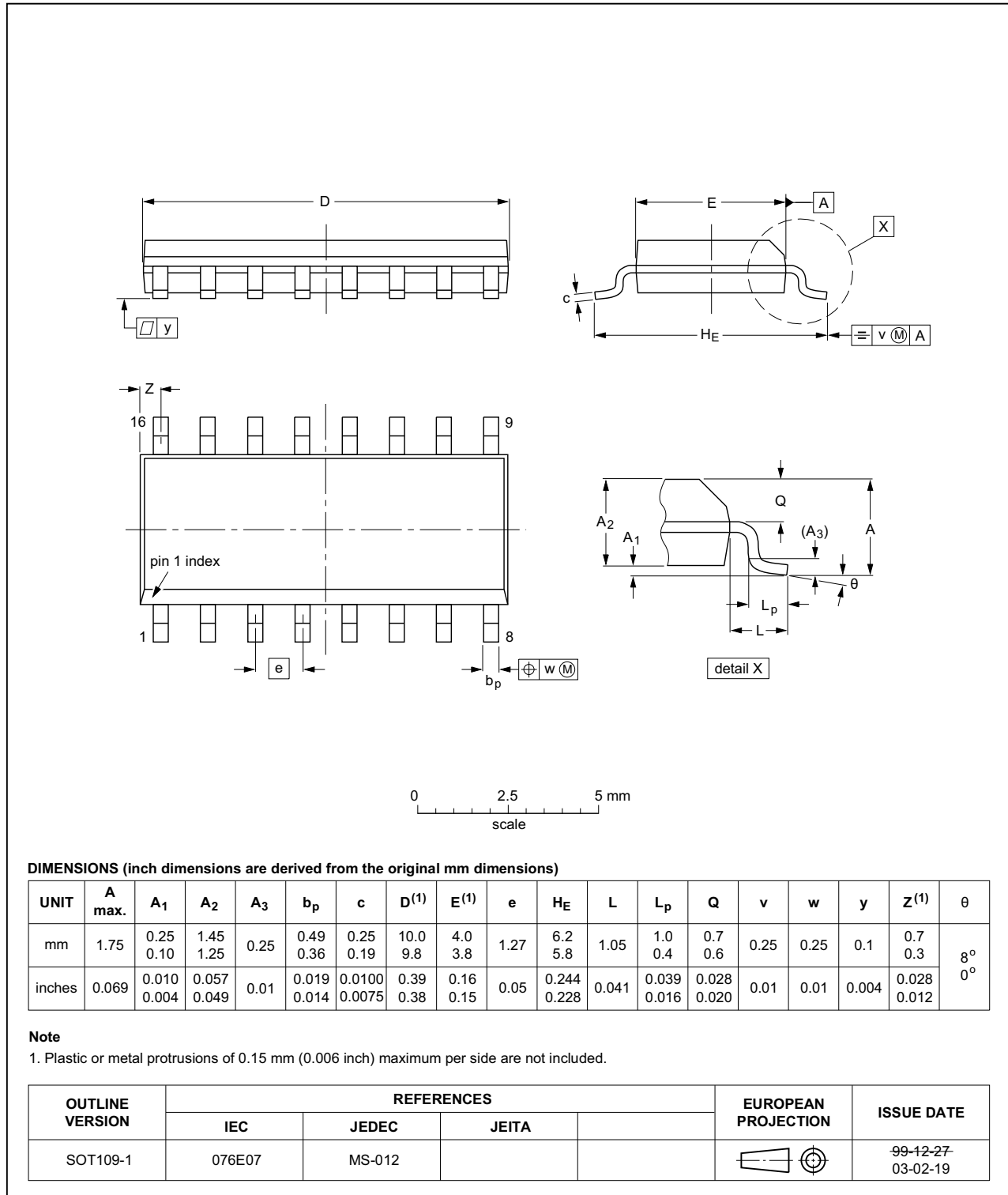


Fig 9. Package outline SOT109-1 (SO16)

SSOP16: plastic shrink small outline package; 16 leads; body width 5.3 mm

SOT338-1

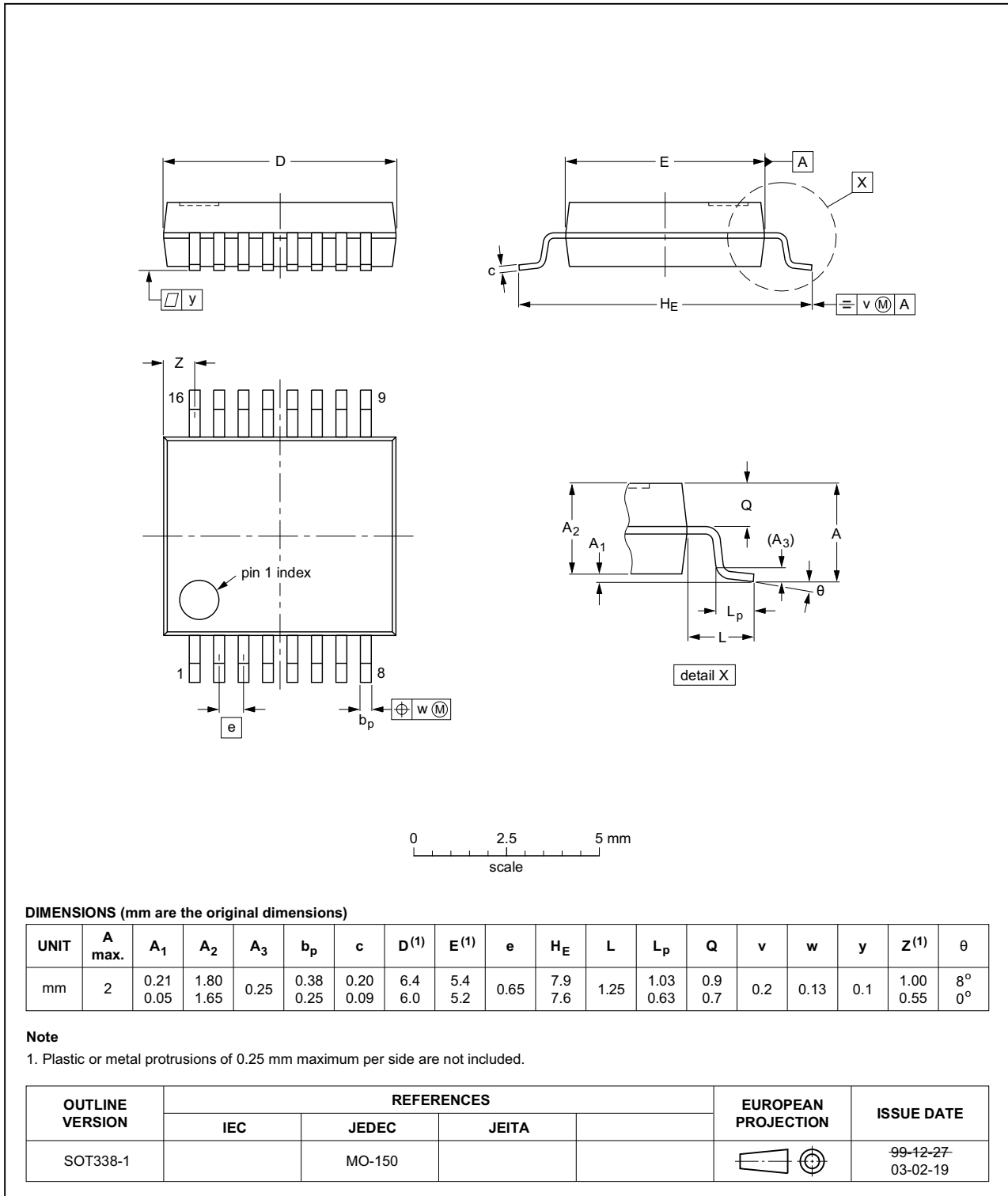


Fig 10. Package outline SOT338-1 (SSOP16)

TSSOP16: plastic thin shrink small outline package; 16 leads; body width 4.4 mm

SOT403-1

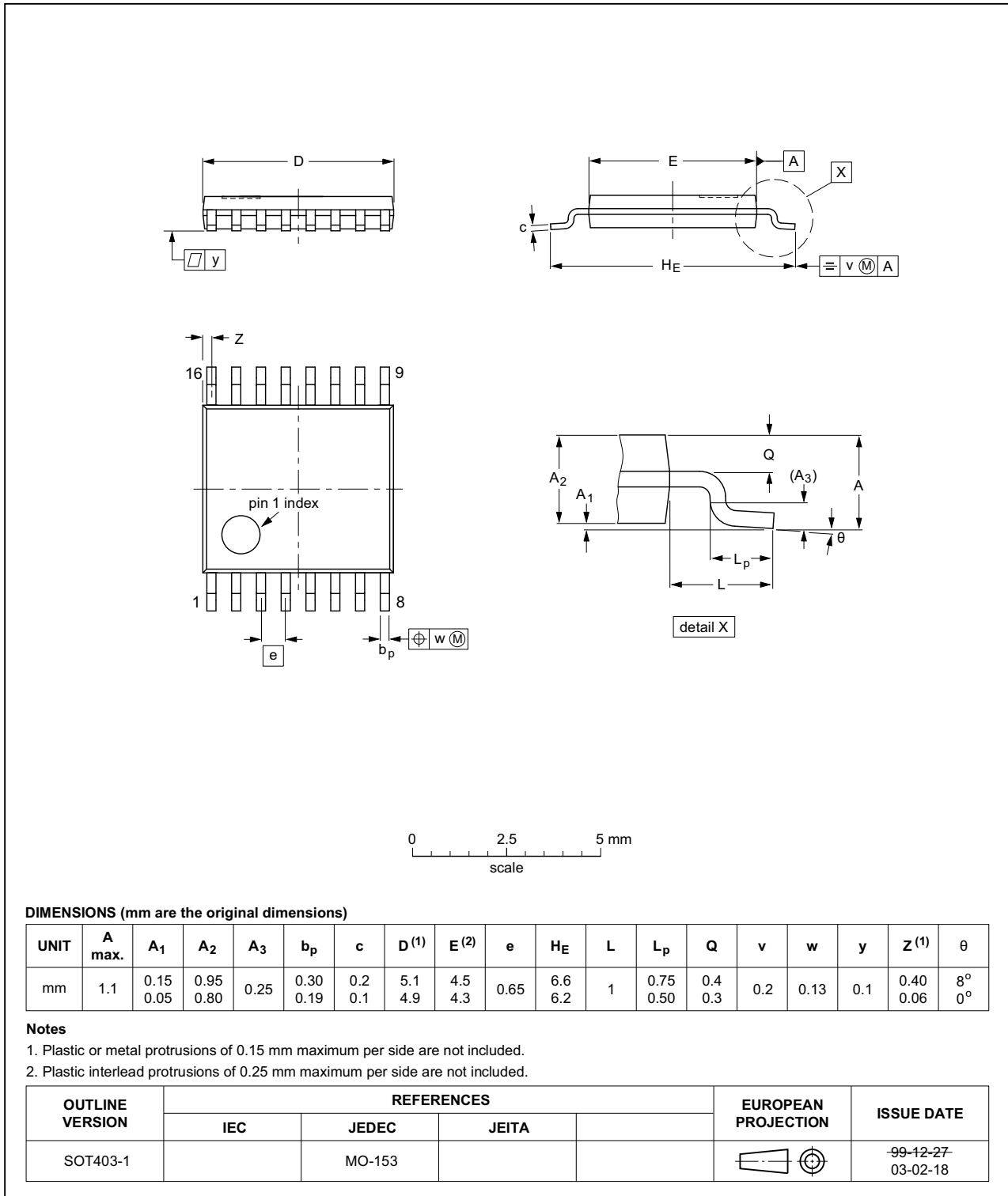


Fig 11. Package outline SOT403-1 (TSSOP16)

## 12. 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 |
| MM      | Machine Model                                  |
| TTL     | Transistor-Transistor Logic                    |

## 13. Revision history

Table 11. Revision history

| Document ID         | Release date   | Data sheet status     | Change notice | Supersedes          |
|---------------------|--|-----------------------|---------------|---------------------|
| 74HC_HCT153 v.6     | 20160511   | Product data sheet    | -             | 74HC_HCT153 v.5     |
| Modifications:      | <ul style="list-style-type: none"> <li>Type numbers 74HC153N and 74HCT153N (SOT38-4) removed.</li> </ul>   |                       |               |                     |
| 74HC_HCT153 v.5     | 20140123   | Product data sheet    | -             | 74HC_HCT153 v.4     |
| Modifications:      | <ul style="list-style-type: none"> <li><a href="#">Table 1</a> and <a href="#">Section 11</a>: all references to 14 pin packages removed.</li> </ul> |                       |               |                     |
| 74HC_HCT153 v.4     | 20131128   | Product data sheet    | -             | 74HC_HCT153 v.3     |
| 74HC_HCT153 v.3     | 20130722   | Product data sheet    | -             | 74HC_HCT153_CNV v.2 |
| 74HC_HCT153_CNV v.2 | 19970827   | Product specification | -             | -                   |

## 14. Legal information

### 14.1 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.                                     |

[1] Please consult the most recently issued document before initiating or completing a design.

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

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