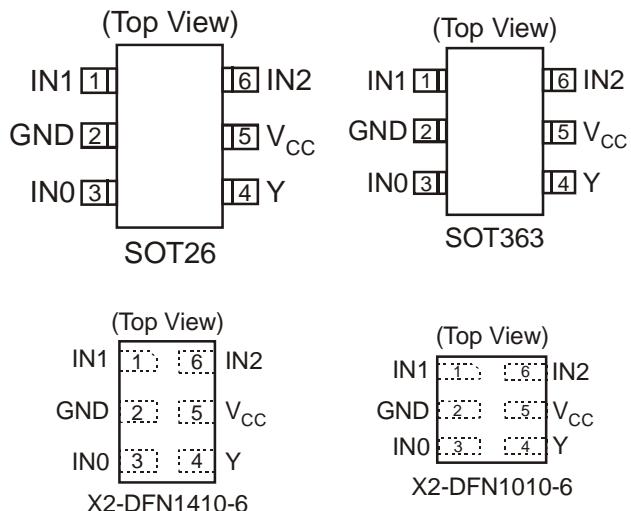


Description

The 74LVC1G97 is a single three-input positive configurable multiple-function gate with a standard push-pull output. The output state is determined by eight patterns of three-bit input. The user can choose the logic functions MUX, AND, OR, NAND, NOR, inverter or non-inverting buffer. All inputs can be connected to ground or V_{CC} as required. The device is designed for operation with a power supply range of 1.65V to 5.5V. The inputs are tolerant to 5.5V allowing this device to be used in a mixed voltage environment. The device is fully specified for partial power-down applications using I_{OFF}. The I_{OFF} circuitry disables the output to prevent damaging current backflow when the device is powered down. The user is reminded that the device can simulate several types of logic gates but may respond differently due to the Schmitt action at the inputs.

Pin Assignments



Features

- Wide Supply Voltage Range from 1.65V to 5.5V
- $\pm 24\text{mA}$ Output Drive at 3.3V
- CMOS Low Power Consumption
- I_{OFF} Supports Partial-Power-Down Mode Operation
- Inputs Accept up to 5.5V
- ESD Protection Exceeds JESD 22
 - 200V Machine Model (A115-A)
 - 2000V Human Body Model (A114-A)
- Latchup Exceeds 100mA per JESD 78, Class II
- Range of Package Options
- SOT26, SOT363, X2-DFN1410-6, and X2-DFN1010-6: Available in "Green" Molding Compound (no Br, Sb)
- Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)**
- Halogen and Antimony Free. "Green" Device (Note 3)**
- For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/104/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please [contact us](#) or your local Diodes representative.**

<https://www.diodes.com/quality/product-definitions/>

Notes:

1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

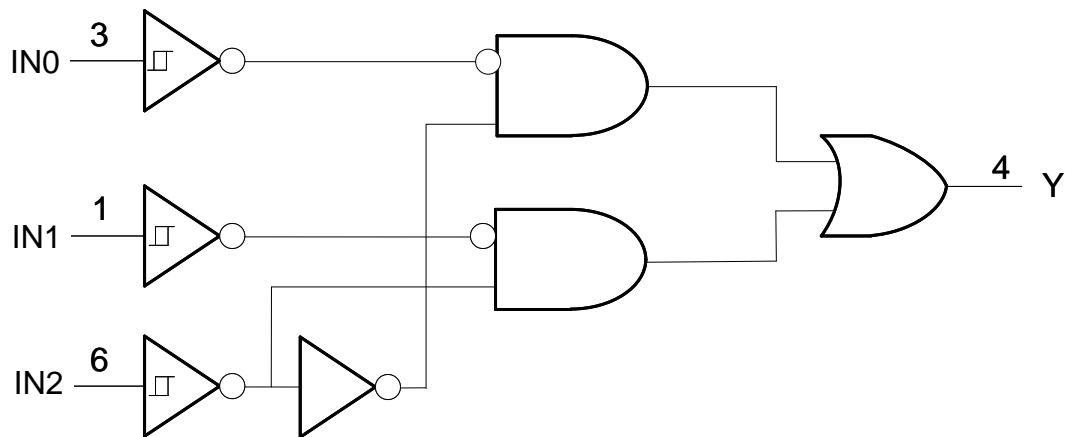
Applications

- Voltage level shifting
- General-purpose logics
- Power-down signal isolation
- Wide array of products such as:
 - PCs, networking, notebooks, netbooks, PDAs
 - Computer peripherals, hard drives, CD/DVD ROM
 - TVs, DVDs, DVRs, set-top boxes
 - Cell phones, personal navigation/GPS
 - MP3 players, cameras, video recorders

Pin Descriptions

| Pin Number | Pin Name | Description |
|------------|----------|----------------|
| 1 | IN1 | Data Input |
| 2 | GND | Ground |
| 3 | IN0 | Data Input |
| 4 | Y | Data Output |
| 5 | Vcc | Supply Voltage |
| 6 | IN2 | Data Input |

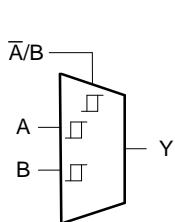
Logic Diagram



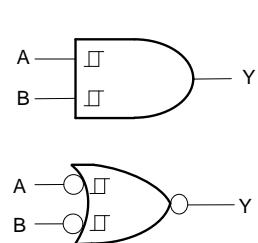
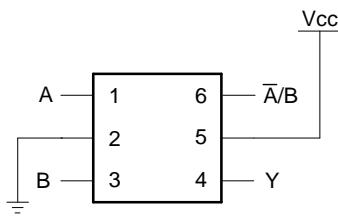
Function Table

| Inputs | | | Output |
|--------|-----|-----|--------|
| IN2 | IN1 | IN0 | Y |
| L | L | L | L |
| L | L | H | L |
| L | H | L | H |
| L | H | H | H |
| H | L | L | L |
| H | L | H | H |
| H | H | L | L |
| H | H | H | H |

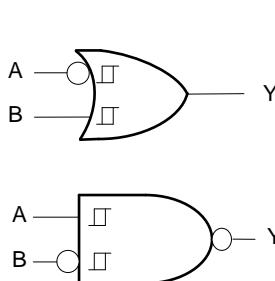
Logic Configurations



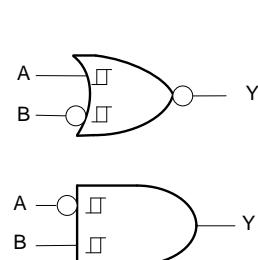
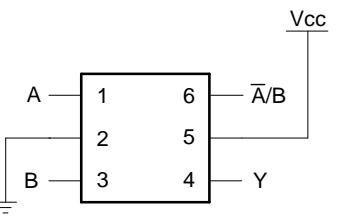
Configuration 1
2 to 1 Data Selector



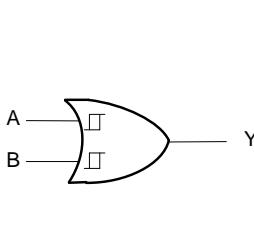
Configuration 2
2-Input AND Gate
2-Input NOR Gate with Both Inputs Inverted



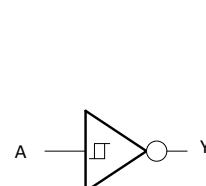
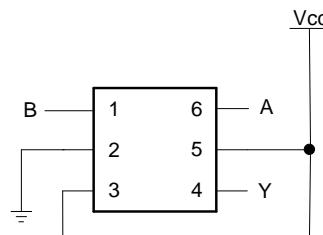
Configuration 3
2-Input NAND Gate with B Input Inverted
2-Input OR Gate with A Input Inverted



Configuration 4
2-Input NOR Gate with One Input Inverted
2-Input AND Gate with One Input Inverted



Configuration 5
2-Input OR Gate



Configuration 6
Inverter

| Function Selection Table | |
|---------------------------------------|---------------|
| Logic Function | Configuration |
| 2-to-1 Data Selector | 1 |
| 2-Input AND GATE | 2 |
| 2-Input AND with Inverted Input | 3, 4 |
| 2-Input NOR with Inverted Input | 3, 4 |
| 2-Input OR | 5 |
| 2-Input NOR with Both Inputs Inverted | 2 |
| 1-Input Inverter | 6 |

Absolute Maximum Ratings (Notes 4, 5)

| Symbol | Description | Rating | Unit |
|------------------|---|------------------------------|------|
| ESD HBM | Human Body Model ESD Protection | 2 | kV |
| ESD MM | Machine Model ESD Protection | 200 | V |
| V _{CC} | Supply Voltage Range | -0.5 to 6.5 | V |
| V _I | Input Voltage Range | -0.5 to 6.5 | V |
| V _O | Voltage applied to output in high impedance or I _{OFF} state | -0.5 to 6.5 | V |
| V _O | Voltage applied to output in high or low state | -0.3 to V _{CC} +0.5 | V |
| I _{IK} | Input Clamp Current V _I < 0 | -50 | mA |
| I _{OK} | Output Clamp Current | -50 | mA |
| I _O | Continuous Output Current | ±50 | mA |
| — | Continuous Current Through V _{DD} or GND | ±100 | mA |
| T _J | Operating Junction Temperature | -40 to +150 | °C |
| T _{STG} | Storage Temperature | -65 to +150 | °C |

Notes:

- Stresses greater than those listed under *Absolute Maximum Ratings* can 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 Ratings* for extended periods can affect device reliability.
- The input and output negative-voltage ratings may be exceeded if the input and output current ratings are observed.

Recommended Operating Conditions (Note 6)

| Symbol | Parameter | Min | Max | Unit |
|-----------------|--------------------------------|-------------------------|-----------------|------|
| V _{CC} | Operating Voltage | Operating | 1.65 | V |
| | | Data retention only | 1.5 | — |
| V _I | Input Voltage | 0 | 5.5 | V |
| V _O | Output Voltage | 0 | V _{CC} | V |
| I _{OH} | High-Level Output Current | V _{CC} = 1.65V | — | -4 |
| | | V _{CC} = 2.3V | — | -8 |
| | | V _{CC} = 3V | — | -16 |
| | | | — | -24 |
| | | V _{CC} = 4.5V | — | -32 |
| I _{OL} | Low-Level Output Current | V _{CC} = 1.65V | — | 4 |
| | | V _{CC} = 2.3V | — | 8 |
| | | V _{CC} = 3V | — | 16 |
| | | | — | 24 |
| | | V _{CC} = 4.5V | — | 32 |
| T _A | Operating Free-Air Temperature | — | -40 | +125 |
| | | | | °C |

Note: 6. Unused inputs should be held at V_{CC} or Ground.

Electrical Characteristics (@ $T_A = -40^\circ\text{C}$ to $+85^\circ\text{C}$. All typical values are at $V_{CC} = 3.3\text{V}$, $T_A = +25^\circ\text{C}$)

| Symbol | Parameter | Test Conditions | V_{CC} | Min | Typ | Max | Unit |
|-----------------|--|--|---------------|----------------|-----|---------|---------------|
| V_{T+} | Positive-Going Input Threshold Voltage | — | 1.65V | 0.70 | — | 1.20 | V |
| | | — | 2.3V | 1.11 | — | 1.60 | |
| | | — | 3V | 1.50 | — | 2.00 | |
| | | — | 4.5V | 2.16 | — | 2.74 | |
| | | — | 5.5V | 2.61 | — | 3.33 | |
| V_{T-} | Negative-Going Input Threshold Voltage | — | 1.65V | 0.30 | — | 0.72 | V |
| | | — | 2.3V | 0.58 | — | 1.00 | |
| | | — | 3V | 0.80 | — | 1.30 | |
| | | — | 4.5V | 1.21 | — | 1.95 | |
| | | — | 5.5V | 1.45 | — | 2.35 | |
| ΔV_T | Hysteresis ($V_{T+} - V_{T-}$) | — | 1.65V | 0.30 | — | 0.62 | V |
| | | — | 2.3V | 0.40 | — | 0.80 | |
| | | — | 3V | 0.35 | — | 1.00 | |
| | | — | 4.5V | 0.55 | — | 1.10 | |
| | | — | 5.5V | 0.60 | — | 1.20 | |
| V_{OH} | High-Level Output Voltage | $I_{OH} = -100\mu\text{A}$ | 1.65V to 5.5V | $V_{CC} - 0.1$ | — | — | V |
| | | $I_{OH} = -4\text{mA}$ | 1.65V | 1.2 | — | — | |
| | | $I_{OH} = -8\text{mA}$ | 2.3V | 1.9 | — | — | |
| | | $I_{OH} = -16\text{mA}$ | 3V | 2.4 | — | — | |
| | | $I_{OH} = -24\text{mA}$ | | 2.3 | — | — | |
| | | $I_{OH} = -32\text{mA}$ | 4.5V | 3.8 | — | — | |
| V_{OL} | High-Level Input Voltage | $I_{OL} = 100\mu\text{A}$ | 1.65V to 5.5V | — | — | 0.1 | V |
| | | $I_{OL} = 4\text{mA}$ | 1.65V | — | — | 0.45 | |
| | | $I_{OL} = 8\text{mA}$ | 2.3V | — | — | 0.3 | |
| | | $I_{OL} = 16\text{mA}$ | 3V | — | — | 0.4 | |
| | | $I_{OL} = 24\text{mA}$ | | — | — | 0.55 | |
| | | $I_{OL} = 32\text{mA}$ | 4.5V | — | — | 0.55 | |
| I_I | Input Current | $V_I = 5.5\text{V}$ or GND | 0 to 5.5V | — | — | ± 1 | μA |
| I_{OFF} | Power-Down Leakage Current | V_I or $V_O = 5.5\text{V}$ | 0 | — | — | ± 2 | μA |
| I_{CC} | Supply Current | $V_I = 5.5\text{V}$ or GND $I_O = 0$ | 1.65V to 5.5V | — | — | 4 | μA |
| ΔI_{CC} | Additional Supply Current | One input at $V_{CC} - 0.6\text{V}$ Other inputs at V_{CC} or GND | 3V to 5.5V | — | — | 500 | μA |

Electrical Characteristics (@ $T_A = -40^\circ\text{C}$ to $+125^\circ\text{C}$. All typical values are at $V_{cc} = 3.3\text{V}$, $T_A = +25^\circ\text{C}$)

| Symbol | Parameter | Test Conditions | V_{cc} | Min | Typ | Max | Unit |
|-----------------|--|--|---------------|----------------|-----|---------|---------------|
| V_{T+} | Positive-Going Input Threshold Voltage | — | 1.65V | 0.70 | — | 1.20 | V |
| | | — | 2.3V | 1.11 | — | 1.60 | |
| | | — | 3V | 1.50 | — | 2.00 | |
| | | — | 4.5V | 2.16 | — | 2.74 | |
| | | — | 5.5V | 2.61 | — | 3.33 | |
| V_{T-} | Negative-Going Input Threshold Voltage | — | 1.65V | 0.30 | — | 0.75 | V |
| | | — | 2.3V | 0.58 | — | 1.03 | |
| | | — | 3V | 0.80 | — | 1.33 | |
| | | — | 4.5V | 1.21 | — | 1.95 | |
| | | — | 5.5V | 1.45 | — | 2.35 | |
| ΔV_T | Hysteresis ($V_{T+} - V_{T-}$) | — | 1.65V | 0.30 | — | 0.62 | V |
| | | — | 2.3V | 0.37 | — | 0.80 | |
| | | — | 3V | 0.32 | — | 1.00 | |
| | | — | 4.5V | 0.50 | — | 1.20 | |
| | | — | 5.5V | 0.55 | — | 1.40 | |
| V_{OH} | High-Level Output Voltage | $I_{OH} = -100\mu\text{A}$ | 1.65V to 5.5V | $V_{cc} - 0.1$ | — | — | V |
| | | $I_{OH} = -4\text{mA}$ | 1.65V | 0.95 | — | — | |
| | | $I_{OH} = -8\text{mA}$ | 2.3V | 1.7 | — | — | |
| | | $I_{OH} = -16\text{mA}$ | 3V | 1.9 | — | — | |
| | | $I_{OH} = -24\text{mA}$ | | 2.0 | — | — | |
| | | $I_{OH} = -32\text{mA}$ | 4.5V | 3.4 | — | — | |
| V_{OL} | High-Level Input Voltage | $I_{OL} = 100\mu\text{A}$ | 1.65V to 5.5V | — | — | 0.1 | V |
| | | $I_{OL} = 4\text{mA}$ | 1.65V | — | — | 0.7 | |
| | | $I_{OL} = 8\text{mA}$ | 2.3V | — | — | 0.45 | |
| | | $I_{OL} = 16\text{mA}$ | 3V | — | — | 0.6 | |
| | | $I_{OL} = 24\text{mA}$ | | — | — | 0.8 | |
| | | $I_{OL} = 32\text{mA}$ | 4.5V | — | — | 0.8 | |
| I_I | Input Current | $V_I = 5.5\text{V}$ or GND | 0 to 5.5V | — | — | ± 1 | μA |
| I_{OFF} | Power-Down Leakage Current | V_I or $V_O = 5.5\text{V}$ | 0 | — | — | ± 2 | μA |
| I_{cc} | Supply Current | $V_I = 5.5\text{V}$ or GND $I_O = 0$ | 1.65V to 5.5V | — | — | 4 | μA |
| ΔI_{cc} | Additional Supply Current | One input at $V_{cc} - 0.6\text{V}$ Other inputs at V_{cc} or GND | 3V to 5.5V | — | — | 500 | μA |

Package Characteristics (All typical values are at $V_{CC} = 3.3V$, $T_A = +25^\circ C$)

| Symbol | Parameter | Test Conditions | V_{CC} | Min | Typ | Max | Unit |
|---------------|--|--------------------------------|----------|-----|-----|-----|------|
| C_I | Input Capacitance | $V_I = V_{CC} - \text{or GND}$ | 3.3 | — | 3.5 | — | pF |
| θ_{JA} | Thermal Resistance Junction-to-Ambient | SOT26 | (Note 7) | — | 204 | — | °C/W |
| | | SOT363 | | — | 371 | — | |
| | | X2-DFN1410-6 | | — | 430 | — | |
| | | X2-DFN1010-6 | | — | 510 | — | |
| θ_{JC} | Thermal Resistance Junction-to-Case | SOT26 | (Note 7) | — | 52 | — | °C/W |
| | | SOT363 | | — | 143 | — | |
| | | X2-DFN1410-6 | | — | 190 | — | |
| | | X2-DFN1010-6 | | — | 250 | — | |

Note: 7. Test condition for SOT26, SOT363, X2-DFN1410-6 and X2-DFN1010-6: device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

Switching Characteristics

$T_A = -40^\circ C \text{ to } +85^\circ C$, $C_L = 30 \text{ or } 50 \text{ pF}$ as noted (See Figure 1)

| Parameter | From (Input) | To (Output) | $V_{CC} = 1.8V \pm 0.15V$ | | $V_{CC} = 2.5V \pm 0.2V$ | | $V_{CC} = 3.3V \pm 0.3V$ | | $V_{CC} = 5V \pm 0.5V$ | | |
|-----------|-----------------|----------------|---------------------------|------|--------------------------|-----|--------------------------|-----|------------------------|-----|----|
| | | | Min | Max | Min | Max | Min | Max | Min | Max | |
| t_{pd} | Any | Y | 1.0 | 14.4 | 0.7 | 8.3 | 0.7 | 6.3 | 0.7 | 5.1 | ns |

$T_A = -40^\circ C \text{ to } +125^\circ C$, $C_L = 30 \text{ or } 50 \text{ pF}$ as noted (See Figure 1)

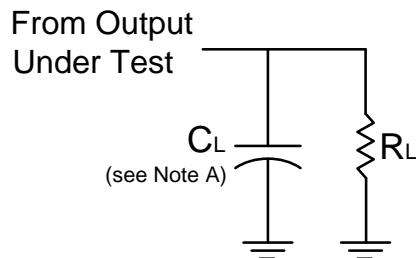
| Parameter | From (Input) | To (Output) | $V_{CC} = 1.8V \pm 0.15V$ | | $V_{CC} = 2.5V \pm 0.2V$ | | $V_{CC} = 3.3V \pm 0.3V$ | | $V_{CC} = 5V \pm 0.5V$ | | |
|-----------|-----------------|----------------|---------------------------|------|--------------------------|------|--------------------------|-----|------------------------|-----|----|
| | | | Min | Max | Min | Max | Min | Max | Min | Max | |
| t_{pd} | Any | Y | 1.0 | 18.0 | 0.7 | 10.4 | 0.7 | 7.9 | 0.7 | 6.4 | ns |

Operating Characteristics

$T_A = +25^\circ C$

| Parameter | Test Conditions | $V_{CC} = 1.8V$ | | $V_{CC} = 2.5V$ | | $V_{CC} = 3.3V$ | | $V_{CC} = 5V$ | | Unit |
|-----------|----------------------------------|-----------------|-----|-----------------|-----|-----------------|-----|---------------|-----|------|
| | | Typ | Typ | Typ | Typ | Typ | Typ | Typ | Typ | |
| C_{pd} | Power Dissipation Capacitance | $f = 10MHz$ | 22 | 22 | 23 | 24 | 24 | 24 | 24 | pF |

Parameter Measurement Information



| V _{cc} | Inputs | | V _M | C _L | R _L |
|-----------------|-----------------|---------------------------------|---------------------|----------------|----------------|
| | V _I | t _r / t _f | | | |
| 1.8V ± 0.15V | V _{cc} | ≤ 2ns | V _{cc} / 2 | 30pF | 1kΩ |
| 2.5V ± 0.2V | V _{cc} | ≤ 2ns | V _{cc} / 2 | 30pF | 500Ω |
| 3.3V ± 0.3V | 3V | ≤ 2.5ns | 1.5V | 50pF | 500Ω |
| 5V ± 0.5V | V _{cc} | ≤ 2.5ns | V _{cc} / 2 | 50pF | 500Ω |

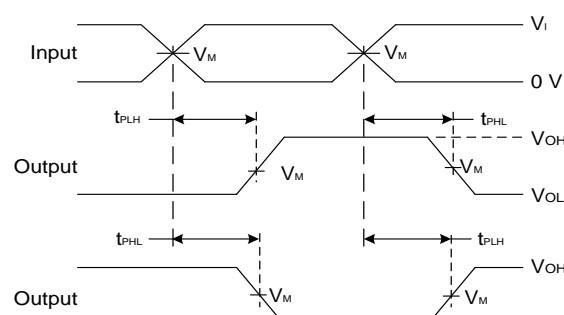
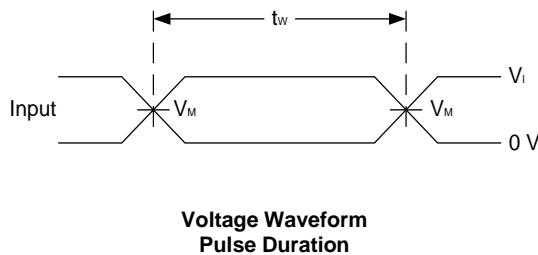
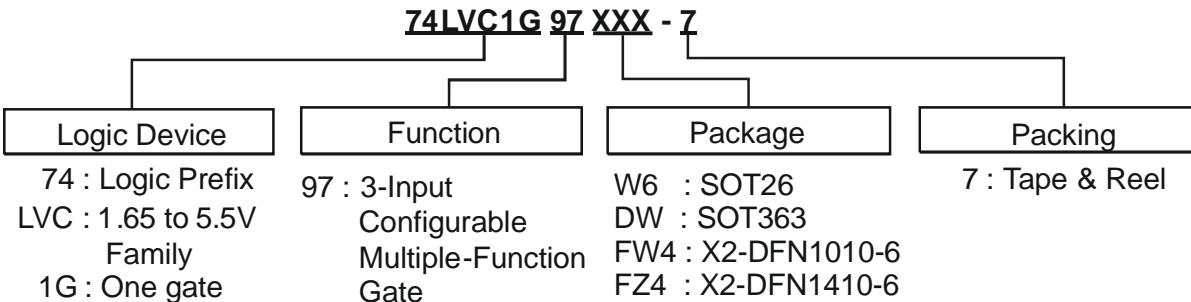


Figure 1. Load Circuit and Voltage Waveforms

Notes:

- A. Includes test lead and test apparatus capacitance.
- B. All pulses are supplied at pulse repetition rate $\leq 10\text{MHz}$.
- C. Inputs are measured separately one transition per measurement.
- D. t_{PLH} and t_{PHL} are the same as t_{PD}.

Ordering Information (Note 8)

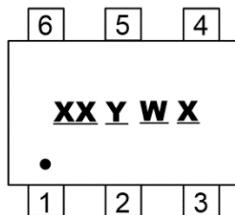


| Part Number | Part Number Suffix | Package Code | Package | Packing | |
|----------------|--------------------|--------------|--------------|---------|------------------|
| | | | | Qty. | Carrier |
| 74LVC1G97W6-7 | -7 | W6 | SOT26 | 3,000 | 7" Tape and Reel |
| 74LVC1G97DW-7 | -7 | DW | SOT363 | 3,000 | 7" Tape and Reel |
| 74LVC1G97FW4-7 | -7 | FW4 | X2-DFN1010-6 | 5,000 | 7" Tape and Reel |
| 74LVC1G97FZ4-7 | -7 | FZ4 | X2-DFN1410-6 | 5,000 | 7" Tape and Reel |

Note: 8. For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.

Marking Information

(1) SOT26, SOT363

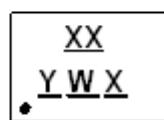


XX: Identification Code
 Y: Year 0 to 9 (ex: 4 = 2024)
 W: Week: A to Z: Week 1 to 26
 a to z: Week 27 to 52; z Represents Week 52 and 53
 X: A to Z: Internal Code

| Part Number | Package | Identification Code |
|---------------|---------|---------------------|
| 74LVC1G97W6-7 | SOT26 | TY |
| 74LVC1G97DW-7 | SOT363 | TY |

(2) X2-DFN1010-6, X2-DFN1410-6

(Top View)



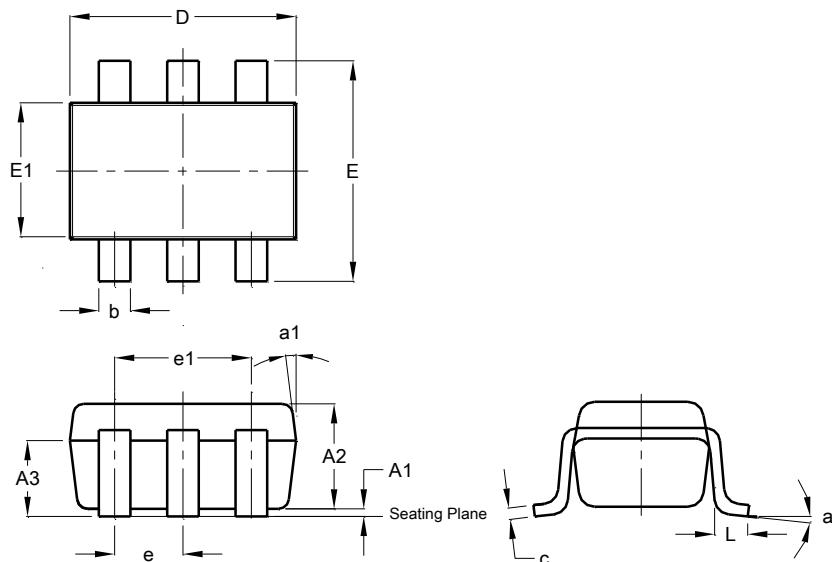
XX: Identification Code
 Y: Year 0 to 9 (ex: 4 = 2024)
 W: Week: A to Z: Week 1 to 26
 a to z: Week 27 to 52; z Represents Week 52 and 53
 X: A to Z: Internal Code

| Part Number | Package | Identification Code |
|----------------|--------------|---------------------|
| 74LVC1G97FW4-7 | X2-DFN1010-6 | TY |
| 74LVC1G97FZ4-7 | X2-DFN1410-6 | TY |

Package Outline Dimensions

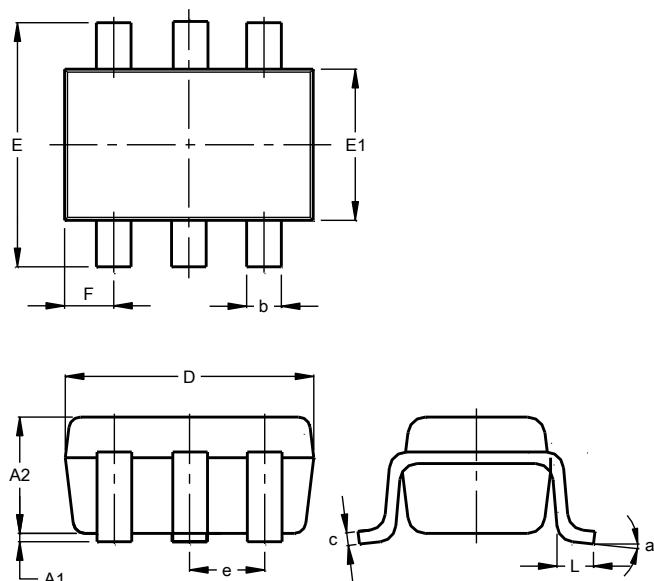
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SOT26



| SOT26 | | | |
|----------------------|-------|------|------|
| Dim | Min | Max | Typ |
| A1 | 0.013 | 0.10 | 0.05 |
| A2 | 1.00 | 1.30 | 1.10 |
| A3 | 0.70 | 0.80 | 0.75 |
| b | 0.35 | 0.50 | 0.38 |
| c | 0.10 | 0.20 | 0.15 |
| D | 2.90 | 3.10 | 3.00 |
| e | - | - | 0.95 |
| e1 | - | - | 1.90 |
| E | 2.70 | 3.00 | 2.80 |
| E1 | 1.50 | 1.70 | 1.60 |
| L | 0.35 | 0.55 | 0.40 |
| a | - | - | 8° |
| a1 | - | - | 7° |
| All Dimensions in mm | | | |

SOT363

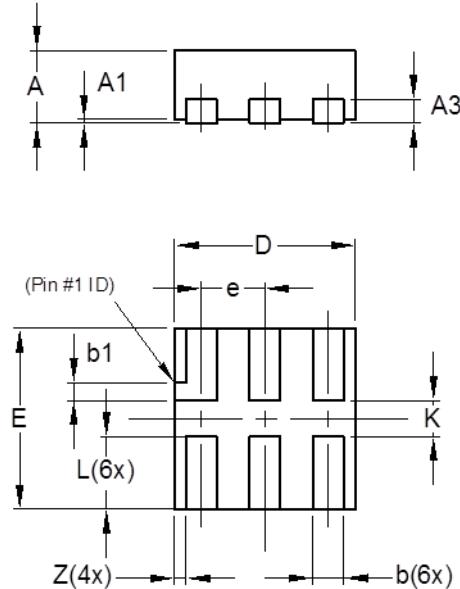


| SOT363 | | | |
|----------------------|-----------|------|-------|
| Dim | Min | Max | Typ |
| A1 | 0.00 | 0.10 | 0.05 |
| A2 | 0.90 | 1.00 | 0.95 |
| b | 0.10 | 0.30 | 0.25 |
| c | 0.10 | 0.22 | 0.11 |
| D | 1.80 | 2.20 | 2.15 |
| E | 2.00 | 2.20 | 2.10 |
| E1 | 1.15 | 1.35 | 1.30 |
| e | 0.650 BSC | | |
| F | 0.40 | 0.45 | 0.425 |
| L | 0.25 | 0.40 | 0.30 |
| a | 0° | 8° | -- |
| All Dimensions in mm | | | |

Package Outline Dimensions (continued)

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

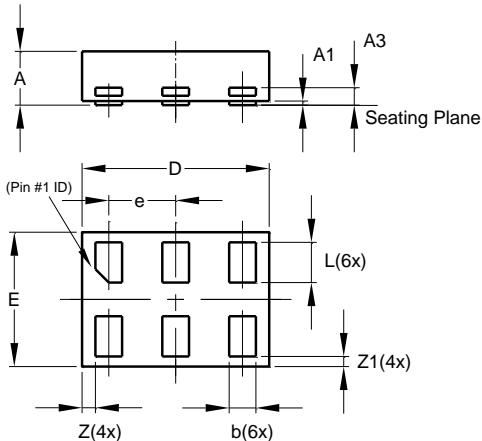
X2-DFN1010-6



| X2-DFN1010-6 | | | |
|--------------|------|------|-------|
| Dim | Min | Max | Typ |
| A | — | 0.40 | 0.39 |
| A1 | 0.00 | 0.05 | 0.02 |
| A3 | — | — | 0.13 |
| b | 0.14 | 0.20 | 0.17 |
| b1 | 0.05 | 0.15 | 0.10 |
| D | 0.95 | 1.05 | 1.00 |
| E | 0.95 | 1.05 | 1.00 |
| e | — | — | 0.35 |
| L | 0.35 | 0.45 | 0.40 |
| K | 0.15 | — | — |
| Z | — | — | 0.065 |

All Dimensions in mm

X2-DFN1410-6

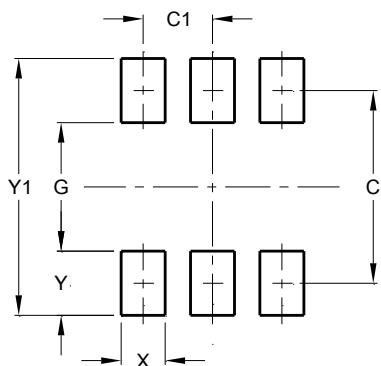


| X2-DFN1410-6 | | | |
|--------------|-------|-------|-------|
| Dim | Min | Max | Typ |
| A | — | 0.40 | 0.39 |
| A1 | 0.00 | 0.05 | 0.02 |
| A3 | — | — | 0.13 |
| b | 0.15 | 0.25 | 0.20 |
| D | 1.35 | 1.45 | 1.40 |
| E | 0.95 | 1.05 | 1.00 |
| e | — | — | 0.50 |
| L | 0.25 | 0.35 | 0.30 |
| Z | — | — | 0.10 |
| Z1 | 0.045 | 0.105 | 0.075 |

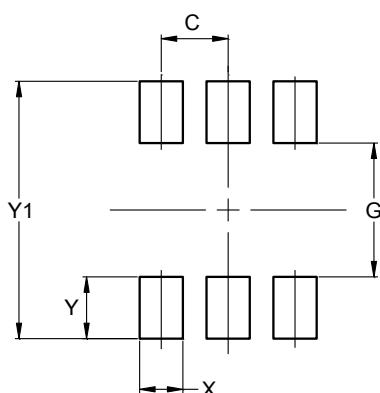
All Dimensions in mm

Suggested Pad Layout (Note 9)

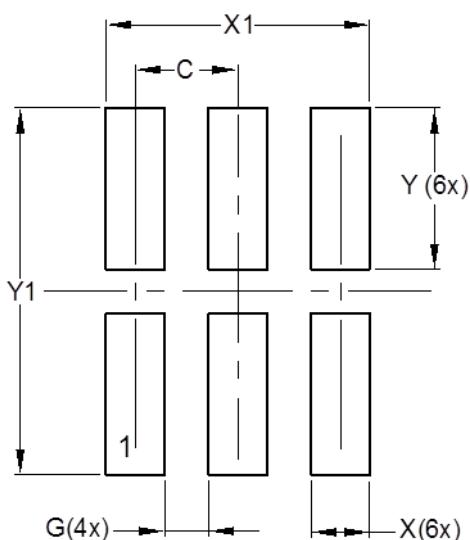
 Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SOT26


| Dimensions | Value (in mm) |
|------------|---------------|
| C | 2.40 |
| C1 | 0.95 |
| G | 1.60 |
| X | 0.55 |
| Y | 0.80 |
| Y1 | 3.20 |

SOT363


| Dimensions | Value (in mm) |
|------------|---------------|
| C | 0.650 |
| G | 1.300 |
| X | 0.420 |
| Y | 0.600 |
| Y1 | 2.500 |

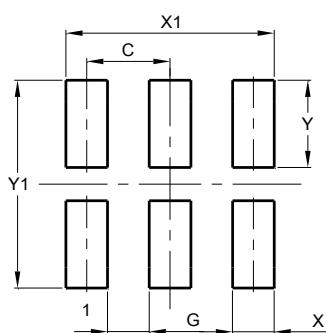
X2-DFN1010-6


| Dimensions | Value (in mm) |
|------------|---------------|
| C | 0.350 |
| G | 0.150 |
| X | 0.200 |
| X1 | 0.900 |
| Y | 0.550 |
| Y1 | 1.250 |

Suggested Pad Layout (Note 9) (continued)

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

X2-DFN1410-6



| Dimensions | Value (in mm) |
|------------|---------------|
| C | 0.500 |
| G | 0.250 |
| X | 0.250 |
| X1 | 1.250 |
| Y | 0.525 |
| Y1 | 1.250 |

Note: 9. The suggested land pattern dimensions have been provided for reference only, as actual pad layouts may vary depending on application. These dimensions may be modified based on user equipment capability or fabrication criteria. A more robust pattern may be desired for wave soldering and is calculated by adding 0.2 mm to the 'Z' dimension. For further information, please reference document IPC-7351A, Naming Convention for Standard SMT Land Patterns, and for International grid details, please see document IEC, Publication 97.

Mechanical Data

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish – Matte Tin Plated Leads, Solderable per MIL-STD-202, Method 208 (e3)
- Weight:
 - SOT26: 0.016 grams (Approximate)
 - SOT363: 0.006 grams (Approximate)
 - X2-DFN1010-6: 0.00118 grams (Approximate)
 - X2-DFN1410-6: 0.002 grams (Approximate)

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