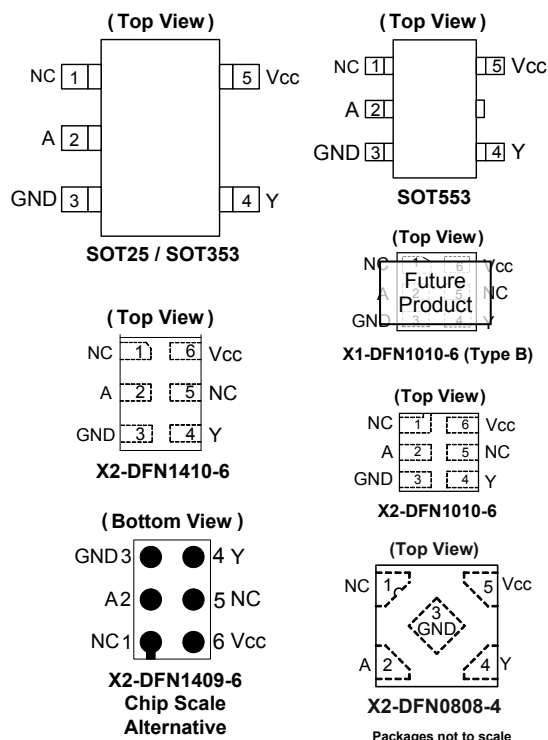


Description

The 74LVC1G17 is a single 1-input Schmitt-trigger buffer with a standard push-pull output. 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 preventing damaging current backflow when the device is powered down. The gate performs the positive Boolean function:

$$Y = A$$

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
- 200-V Machine Model (A115)
- 2,000-V Human Body Model (A114)
- Latch-Up Exceeds 100mA per JESD 78, Class I
- Range of Package Options
- **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-Q100/101/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please [contact us](#) or your local Diodes representative.**
<https://www.diodes.com/quality/product-definitions/>
- **An Automotive-Compliant Part is Available Under Separate Datasheet ([74LVC1G17Q](#))**

Applications

- Voltage Level Shifting
- General Purpose Logic
- Power Down Signal Isolation
- Wide Array of Products such as:
 - PCs, Networking, Notebooks, Netbooks, PDAs
 - Computer Peripherals, Hard Drives, CD/DVD ROM
 - TV, DVD, DVR, Set Top Box
 - Cell Phones, Personal Navigation / GPS
 - MP3 Players, Cameras, Video Recorders

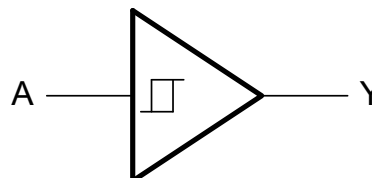
Notes:

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.

Pin Descriptions

Pin Name	Description
A	Data Input
GND	Ground
Y	Data Output
V _{CC}	Supply Voltage

Logic Diagram



Function Table

Input	Output
A	Y
H	H
L	L

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	-0.5 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
I _{CC} , I _{GND}	Continuous Current through V _{CC} or GND	±100	mA
T _J	Operating Junction Temperature	-40 to +150	°C
T _{STG}	Storage Temperature	-65 to +150	°C

- Notes:
- Stresses beyond the absolute maximum can result in immediate failure or reduced reliability. These are stress values and device operation should be within recommend values.
 - Forcing the maximum allowed voltage could cause a condition exceeding the maximum current or conversely forcing the maximum current could cause a condition exceeding the maximum voltage. The ratings of both current and voltage must be maintained within the controlled range.

Recommended Operating Conditions (Note 6)

Symbol	Parameter		Min	Max	Unit
V_{CC}	Operating Voltage	Operating	1.65	5.5	V
		Data retention only	1.5	—	V
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	mA
		$V_{CC} = 2.3V$	—	-8	
		$V_{CC} = 2.7V$	—	-12	
		$V_{CC} = 3V$	—	-16	
			—	-24	
		$V_{CC} = 4.5V$	—	-32	
I_{OL}	Low-Level Output current	$V_{CC} = 1.65V$	—	4	mA
		$V_{CC} = 2.3V$	—	8	
		$V_{CC} = 2.7V$	—	12	
		$V_{CC} = 3V$	—	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	—
		—	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	—
		—	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	—
		—	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	—	—	
		$I_{OH} = -12\text{mA}$	2.7V	2.2	—	—	
		$I_{OH} = -16\text{mA}$	3V	2.4	—	—	
		$I_{OH} = -24\text{mA}$		2.3	—	—	
		$I_{OH} = -32\text{mA}$	4.5V	3.8	—	—	
V_{OL}	Low-Level Output 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	
		$I_{OL} = 12\text{mA}$	2.7V	—	—	0.4	
		$I_{OL} = 16\text{mA}$	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	—	—	± 5	μA
I_{OFF}	Power Down Leakage Current	V_I or $V_O = 5.5\text{V}$	0	—	—	± 10	μA
I_{CC}	Supply Current	$V_I = 5.5\text{V}$ of GND $I_O = 0$	1.65V to 5.5V	—	—	10	μA
ΔI_{CC}	Additional Supply Current	Input at $V_{CC} - 0.6\text{V}$	3V to 5.5V	—	—	500	μA

Electrical Characteristics (continued) (@ $T_A = -40^\circ\text{C}$ 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	—
		—	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	—
		—	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	—
		—	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	—	—	
		$I_{OH} = -12\text{mA}$	2.7V	1.9	—	—	
		$I_{OH} = -16\text{mA}$	3V	2.2	—	—	
		$I_{OH} = -24\text{mA}$		2.0	—	—	
		$I_{OH} = -32\text{mA}$	4.5V	3.4	—	—	
V_{OL}	Low-Level Output 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	
		$I_{OL} = 12\text{mA}$	2.7V	—	—	0.6	
		$I_{OL} = 16\text{mA}$	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	—	—	± 5	μA
I_{OFF}	Power Down Leakage Current	V_I or $V_O = 5.5\text{V}$	0	—	—	± 10	μA
I_{CC}	Supply Current	$V_I = 5.5\text{V}$ of GND $I_O = 0$	1.65V to 5.5V	—	—	10	μA
ΔI_{CC}	Additional Supply Current	Input at $V_{CC} - 0.6\text{V}$	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
θ_{JA}	Thermal Resistance Junction-to-Ambient	SOT25	(Note 7)	—	204	—	$^\circ C/W$
		SOT353		—	371	—	
		SOT553		—	231	—	
		X2-DFN0808-4		—	400	—	
		X1-DFN1010-6 (Type B)		—	435	—	
		X2-DFN1010-6		—	445	—	
		X2-DFN1409-6		—	470	—	
		X2-DFN1410-6		—	460	—	
θ_{JC}	Thermal Resistance Junction-to-Case	SOT25	(Note 7)	—	52	—	$^\circ C/W$
		SOT353		—	143	—	
		SOT553		—	105	—	
		X2-DFN0808-4		—	225	—	
		X1-DFN1010-6 (Type B)		—	250	—	
		X2-DFN1010-6		—	250	—	
		X2-DFN1409-6		—	275	—	
		X2-DFN1410-6		—	265	—	

Note: 7. Test condition for each of the 8 package types: Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

Switching Characteristics

$T_A = -40^\circ C$ to $+85^\circ C$, $C_L = 15pF$ as noted (See Figure 1)

Parameter	From Input	To Output	$V_{CC} = 1.8V$ $\pm 0.15V$		$V_{CC} = 2.5V$ $\pm 0.2V$		$V_{CC} = 3.3V$ $\pm 0.3V$		$V_{CC} = 5V$ $\pm 0.5V$		Unit
			Min	Max	Min	Max	Min	Max	Min	Max	
t_{PD}	A	Y	1.0	9.9	0.7	5.5	0.7	4.6	0.7	4.4	ns

$T_A = -40^\circ C$ to $+85^\circ C$, $C_L = 30pF$ or $50pF$ as noted (See Figure 2)

Parameter	From Input	To Output	$V_{CC} = 1.8V$ $\pm 0.15V$		$V_{CC} = 2.5V$ $\pm 0.2V$		$V_{CC} = 3.3V$ $\pm 0.3V$		$V_{CC} = 5V$ $\pm 0.5V$		Unit
			Min	Max	Min	Max	Min	Max	Min	Max	
t_{PD}	A	Y	1.0	11	0.7	6.5	0.7	5.5	0.7	5	ns

$T_A = -40^\circ C$ to $+125^\circ C$, $C_L = 15pF$ as noted (See Figure 1)

Parameter	From Input	To Output	$V_{CC} = 1.8V$ $\pm 0.15V$		$V_{CC} = 2.5V$ $\pm 0.2V$		$V_{CC} = 3.3V$ $\pm 0.3V$		$V_{CC} = 5V$ $\pm 0.5V$		Unit
			Min	Max	Min	Max	Min	Max	Min	Max	
t_{PD}	A	Y	1.0	12.5	0.7	7.5	0.7	6.5	0.7	5.5	ns

$T_A = -40^\circ C$ to $+125^\circ C$, $C_L = 30pF$ or $50pF$ as noted (See Figure 2)

Parameter	From Input	To Output	$V_{CC} = 1.8V$ $\pm 0.15V$		$V_{CC} = 2.5V$ $\pm 0.2V$		$V_{CC} = 3.3V$ $\pm 0.3V$		$V_{CC} = 5V$ $\pm 0.5V$		Unit
			Min	Max	Min	Max	Min	Max	Min	Max	
t_{PD}	A	Y	1.0	14.0	0.7	8.5	0.7	7.0	0.7	6.5	ns

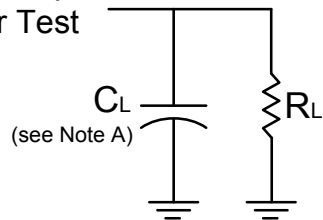
Operating Characteristics

$T_A = +25^\circ\text{C}$

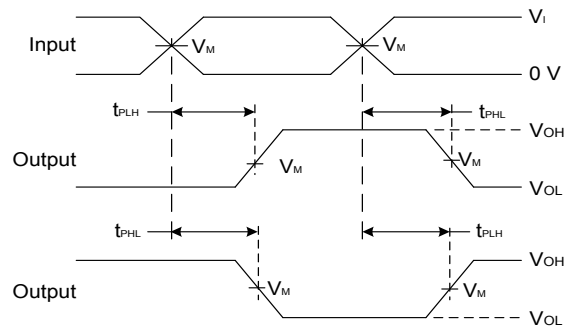
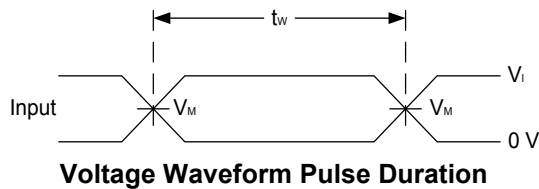
Parameter		Test Conditions	$V_{CC} = 1.8\text{V}$	$V_{CC} = 2.5\text{V}$	$V_{CC} = 3.3\text{V}$	$V_{CC} = 5\text{V}$	Unit
			Typ	Typ	Typ	Typ	
C_{PD}	Power Dissipation Capacitance	$f = 10\text{MHz}$	20	22	23	25	pF

Parameter Measurement Information

From Output
Under Test



V_{CC}	Inputs		V_M	C_L	R_L
	V_I	t_R/t_F			
$1.8\text{V} \pm 0.15\text{V}$	V_{CC}	$\leq 2\text{ns}$	$V_{CC}/2$	15pF	1M Ω
$2.5\text{V} \pm 0.2\text{V}$	V_{CC}	$\leq 2\text{ns}$	$V_{CC}/2$	15pF	1M Ω
$3.3\text{V} \pm 0.3\text{V}$	3V	$\leq 2.5\text{ns}$	1.5V	15pF	1M Ω
$5\text{V} \pm 0.5\text{V}$	V_{CC}	$\leq 2.5\text{ns}$	$V_{CC}/2$	15pF	1M Ω

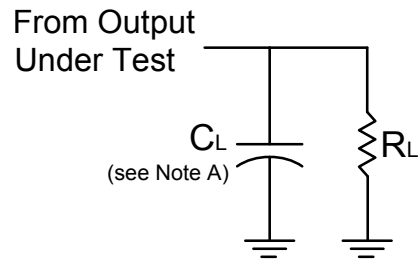


**Voltage Waveform Propagation Delay Times
Inverting and Non Inverting Outputs**

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} .

Parameter Measurement Information (continued)



V_{CC}	Inputs		V_M	C_L	R_L
	V_I	t_R/t_F			
$1.8V \pm 0.15V$	V_{CC}	$\leq 2ns$	$V_{CC}/2$	30pF	1k Ω
$2.5V \pm 0.2V$	V_{CC}	$\leq 2ns$	$V_{CC}/2$	30pF	500 Ω
$3.3V \pm 0.3V$	3V	$\leq 2.5ns$	1.5V	50pF	500 Ω
$5V \pm 0.5V$	V_{CC}	$\leq 2.5ns$	$V_{CC}/2$	50pF	500 Ω

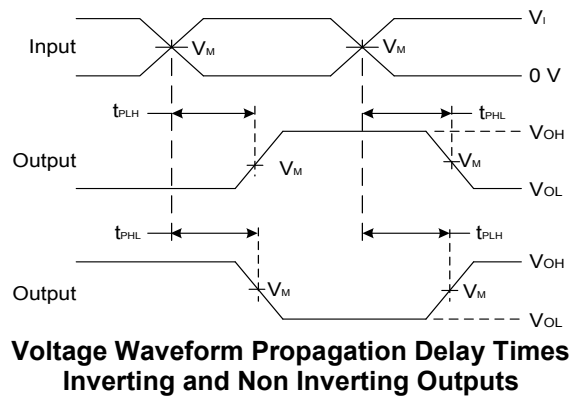
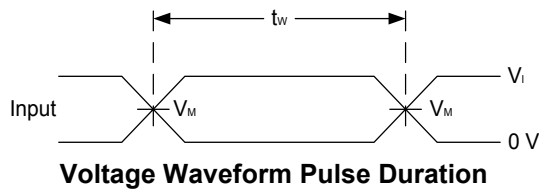
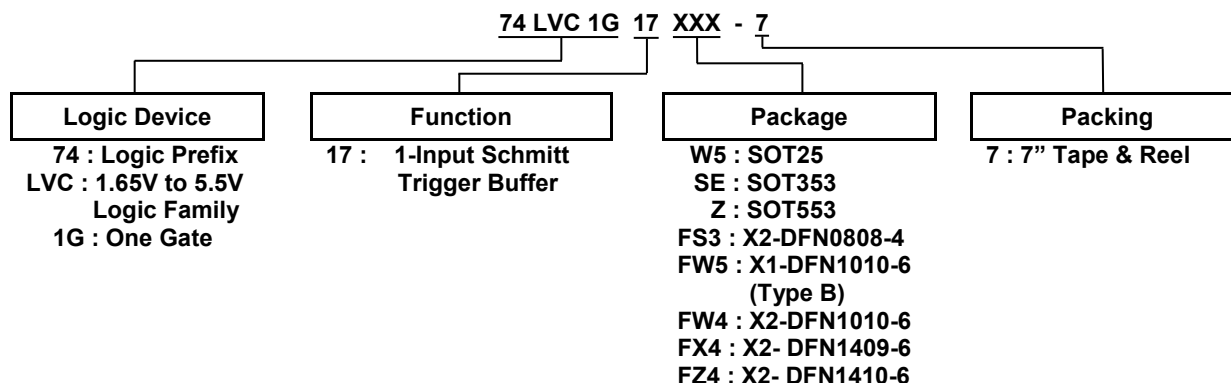


Figure 2. Load Circuit and Voltage Waveforms

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

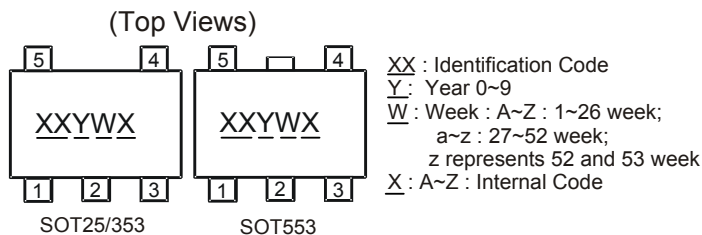
Ordering Information (Note 8)


Device	Package Code	Package (Notes 9, 10)	Package Size	7" Tape and Reel	
				Quantity	Part Number Suffix
74LVC1G17W5-7	W5	SOT25	3.0mm × 2.8mm × 1.2mm 0.95 mm lead pitch	3,000/Tape & Reel	-7
74LVC1G17SE-7	SE	SOT353	2.0mm × 2.0mm × 1.1mm 0.65 mm lead pitch	3,000/Tape & Reel	-7
74LVC1G17Z-7	Z	SOT553	1.1.6mm × 1.6 mm × 0.62mm 0.5 mm lead pitch	4,000/Tape & Reel	-7
74LVC1G17FS3-7	FS3	X2-DFN0808-4	0.9mm × 0.9 mm × 0.35mm 0.5 mm pad pitch (diamond)	5,000/Tape & Reel	-7
74LVC1G17FW5-7 (Future Product)	FW5	X1-DFN1010-6 (Type B) (Future Product)	1.0mm × 1.0mm × 0.5mm 0.35 mm pad pitch	5,000/Tape & Reel	-7
74LVC1G17FW4-7	FW4	X2-DFN1010-6	1.0mm × 1.0mm × 0.4mm 0.35 mm pad pitch	5,000/Tape & Reel	-7
74LVC1G17FX4-7	FX4	X2-DFN1409-6 (Chip Scale Alternative)	1.4mm × 0.9mm × 0.4mm 0.5 mm pad pitch	5,000/Tape & Reel	-7
74LVC1G17FZ4-7	FZ4	X2-DFN1410-6	1.4mm × 1.0mm × 0.4mm 0.5 mm pad pitch	5,000/Tape & Reel	-7

Notes: 8. For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.
 9. Pad layout as shown in Diodes Incorporated's package outline PDFs, which can be found on our website at <http://www.diodes.com/package-outlines.html>.
 10. The taping orientation is located on our website at <https://www.diodes.com/assets/Packaging-Support-Docs/ap02007.pdf>.

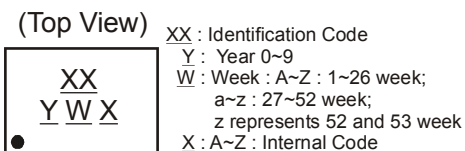
Marking Information

(1) SOT25, SOT353 and SOT553



Part Number	Package	Identification Code
74LVC1G17W5-7	SOT25	UR
74LVC1G17SE-7	SOT353	UR
74LVC1G17Z-7	SOT553	UR

(2) DFN Packages

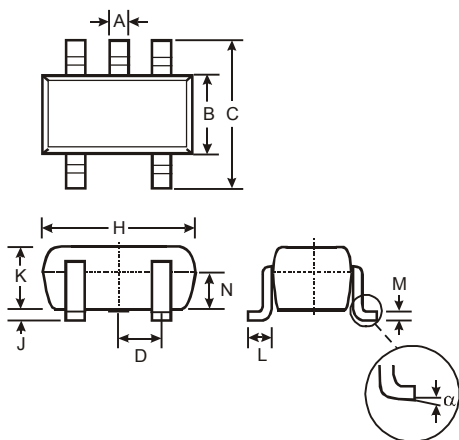


Part Number	Package	Identification Code
74LVC1G17FS3-7	X2-DFN0808-4	WR
74LVC1G17FW5-7	X1-DFN1010-6 (Type B)	V9
74LVC1G17FW4-7	X2-DFN1010-6	UR
74LVC1G17FX4-7	X2-DFN1409-6	MH
74LVC1G17FZ4-7	X2-DFN1410-6	UR

Package Outline Dimensions

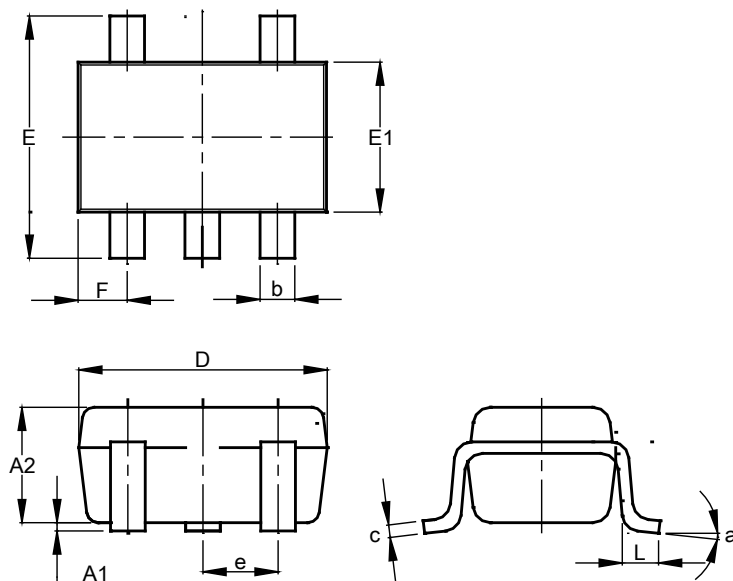
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(1) Package Type: SOT25



SOT25			
Dim	Min	Max	Typ
A	0.35	0.50	0.38
B	1.50	1.70	1.60
C	2.70	3.00	2.80
D	-	-	0.95
H	2.90	3.10	3.00
J	0.013	0.10	0.05
K	1.00	1.30	1.10
L	0.35	0.55	0.40
M	0.10	0.20	0.15
N	0.70	0.80	0.75
α	0°	8°	-
All Dimensions in mm			

(2) Package Type: SOT353

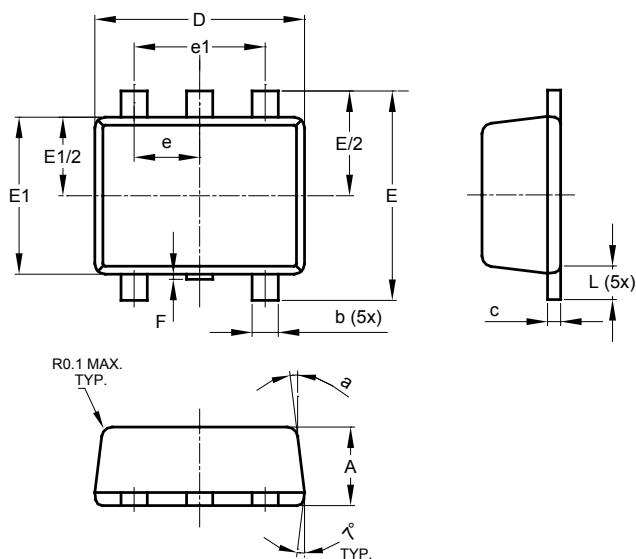


SOT353			
Dim	Min	Max	Typ
A1	0.00	0.10	0.05
A2	0.90	1.00	0.95
b	0.10	0.30	0.25
c	0.10	0.22	0.11
D	1.80	2.20	2.15
E	2.00	2.20	2.10
E1	1.15	1.35	1.30
e	0.650 BSC		
F	0.40	0.45	0.425
L	0.25	0.40	0.30
a	0°	8°	--
All Dimensions in mm			

Package Outline Dimensions (continued)

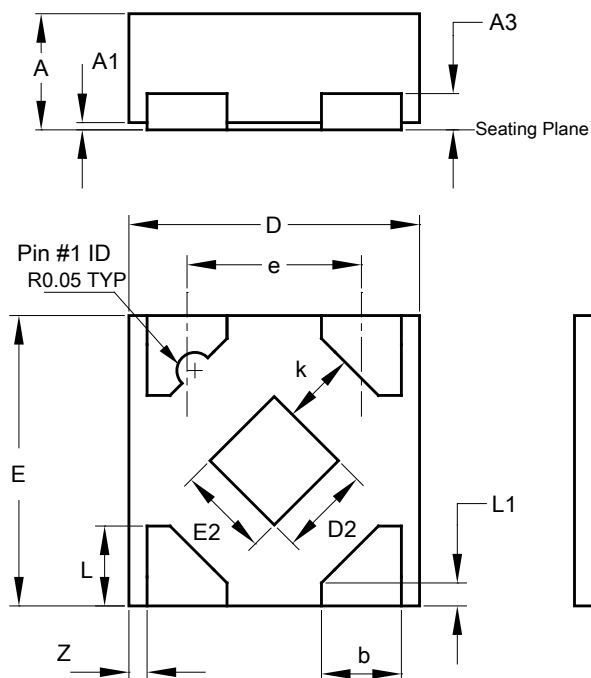
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(3) Package Type: SOT553



SOT553			
Dim	Min	Max	Typ
A	0.55	0.62	0.60
b	0.15	0.30	0.20
c	0.10	0.18	0.15
D	1.50	1.70	1.60
E	1.55	1.70	1.60
E1	1.10	1.25	1.20
e	0.50 BSC		
e1	1.00 BSC		
F	0.00	0.10	—
L	0.10	0.30	0.20
a	6°	8°	7°
All Dimensions in mm			

(4) Package Type: X2-DFN0808-4

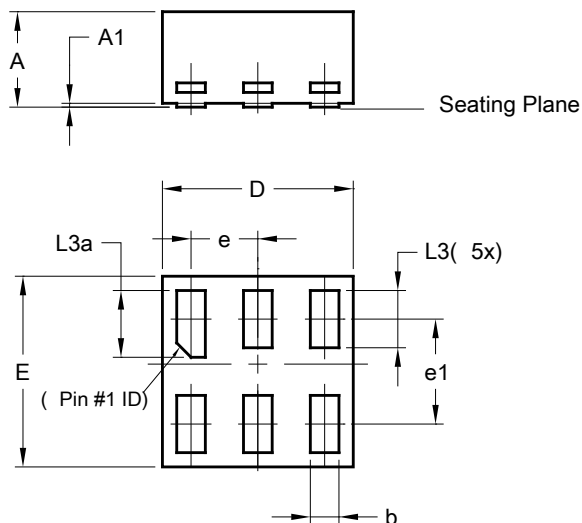


X2-DFN0808-4			
Dim	Min	Max	Typ
A	0.25	0.35	0.30
A1	0	0.04	0.02
A3	-	-	0.13
b	0.17	0.27	0.22
D	0.75	0.85	0.80
D2	0.15	0.35	0.25
E	0.75	0.85	0.80
E2	0.15	0.35	0.25
e	-	-	0.48
k	0.20	-	-
L	0.17	0.27	0.22
L1	0.02	0.12	0.07
z	-	-	0.05
All Dimensions in mm			

Package Outline Dimensions (continued)

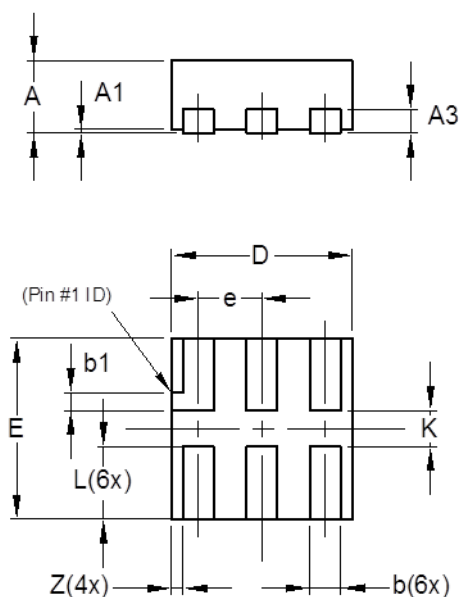
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(5) Package Type: X1-DFN1010-6 (Type B)



X1-DFN1010-6 (Type B)			
Dim	Min	Max	Typ
A	-	0.50	0.39
A1	-	0.04	-
b	0.12	0.20	0.15
D	0.95	1.050	1.00
E	0.95	1.050	1.00
e	0.35 BSC		
e1	0.55 BSC		
L3	0.27	0.30	0.30
L3a	0.32	0.40	0.35
All Dimensions in mm			

(6) Package Type: X2-DFN1010-6

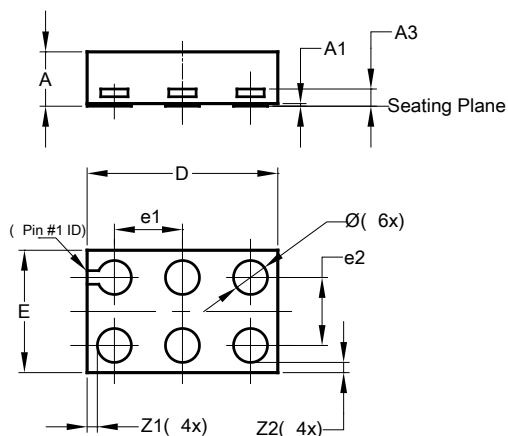


X2-DFN1010-6			
Dim	Min	Max	Typ
A	—	0.40	0.39
A1	0.00	0.05	0.02
A3	—	—	0.13
b	0.14	0.20	0.17
b1	0.05	0.15	0.10
D	0.95	1.05	1.00
E	0.95	1.05	1.00
e	—	—	0.35
L	0.35	0.45	0.40
K	0.15	—	—
Z	—	—	0.065
All Dimensions in mm			

Package Outline Dimensions (continued)

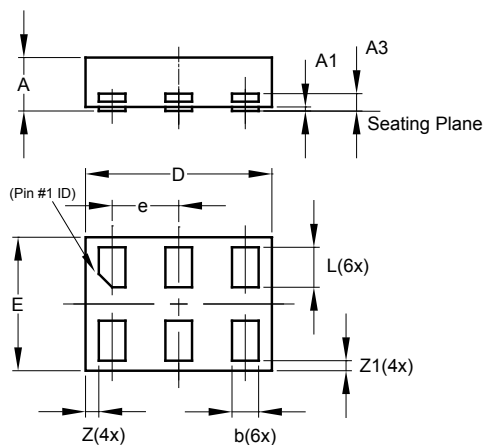
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(7) Package Type: X2-DFN1409-6



X2-DFN1409-6			
Dim	Min	Max	Typ
A	-	0.40	0.39
A1	0	0.05	0.02
A3	-	-	0.13
Ø	0.20	0.30	0.25
D	1.35	1.45	1.40
E	0.85	0.95	0.90
e1	-	-	0.50
e2	-	-	0.50
Z1	-	-	0.075
Z2	-	-	0.075
All Dimensions in mm			

(8) Package Type: X2-DFN1410-6

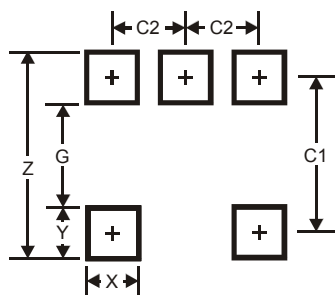


X2-DFN1410-6			
Dim	Min	Max	Typ
A	—	0.40	0.39
A1	0.00	0.05	0.02
A3	—	—	0.13
b	0.15	0.25	0.20
D	1.35	1.45	1.40
E	0.95	1.05	1.00
e	—	—	0.50
L	0.25	0.35	0.30
Z	—	—	0.10
Z1	0.045	0.105	0.075
All Dimensions in mm			

Suggested Pad Layout

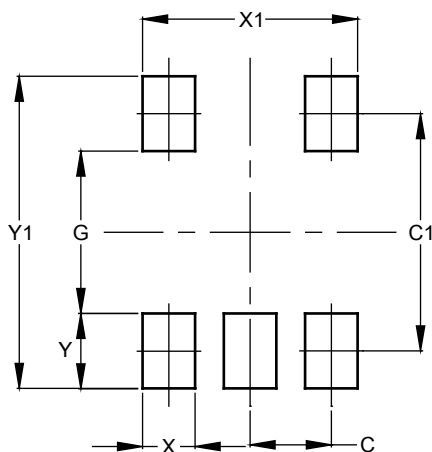
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(1) Package Type: SOT25



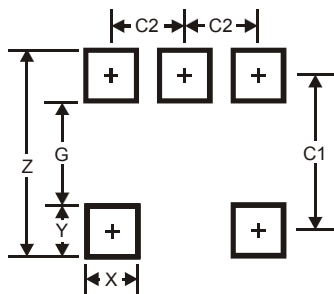
Dimensions	Value
Z	3.20
G	1.60
X	0.55
Y	0.80
C1	2.40
C2	0.95

(2) Package Type: SOT353



Dimensions	Value (in mm)
C	0.650
C1	1.900
G	1.300
X	0.420
X1	1.720
Y	0.600
Y1	2.500

(3) Package Type: SOT553

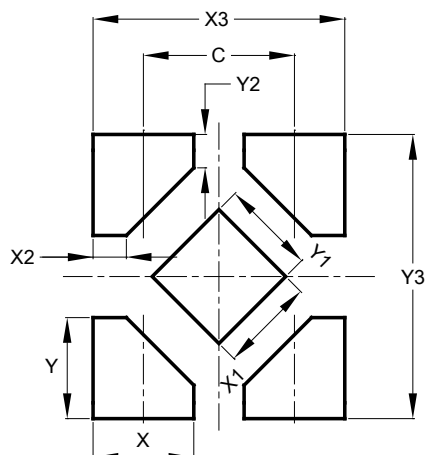


Dimensions	Value (in mm)
Z	2.2
G	1.2
X	0.375
Y	0.5
C1	1.7
C2	0.5

Suggested Pad Layout (continued)

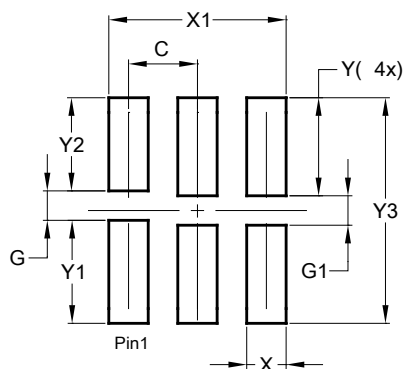
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(4) Package Type: X2-DFN0808-4



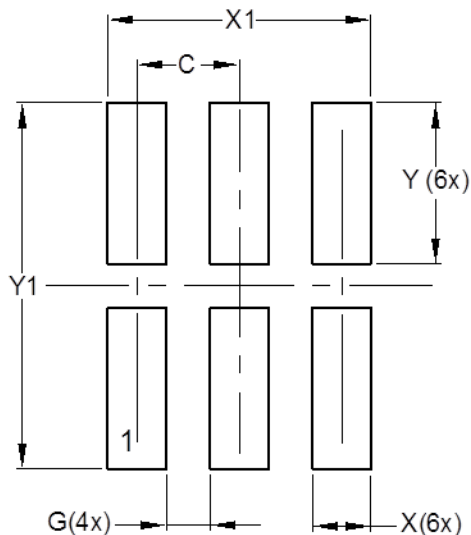
Dimensions	Value
C	0.480
X	0.320
X1	0.300
X2	0.106
X3	0.800
Y	0.320
Y1	0.300
Y2	0.106
Y3	0.900

(5) Package Type: X1-DFN1010-6 (Type B)



Dimensions	Value (in mm)
C	0.350
G	0.150
G1	0.150
X	0.200
X1	0.900
Y	0.500
Y1	0.525
Y2	0.475
Y3	1.150

(6) Package Type: X2-DFN1010-6

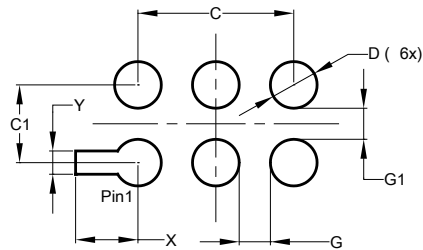


Dimensions	Value (in mm)
C	0.350
G	0.150
X	0.200
X1	0.900
Y	0.550
Y1	1.250

Suggested Pad Layout (continued)

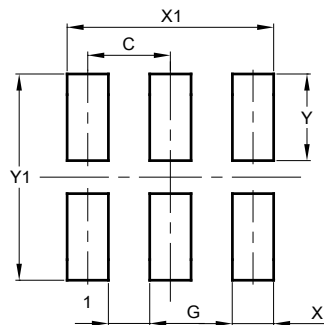
Please see <http://www.diodes.com/package-outlines.html> for the latest version.

(7) Package Type: X2-DFN1409-6



Dimensions	Value (in mm)
C	1.000
C1	0.500
D	0.300
G	0.200
G1	0.200
X	0.400
Y	0.150

(8) Package Type: 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

Mechanical Data

SOT25

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - Matte Tin Plated Leads, Solderable per MIL-STD-202, Method 208 [e3](#)
- Weight: 0.016 grams (Approximate)

SOT353

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - Matte Tin Plated Leads, Solderable per MIL-STD-202, Method 208 [e3](#)
- Weight: 0.006 grams (Approximate)

SOT553

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - Matte Tin Plated Leads, Solderable per MIL-STD-202, Method 208 [e3](#)
- Weight: 0.003 grams (Approximate)

X2-DFN0808-4

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - NiPdAu Nickel Palladium Gold, Solderable per MIL-STD-202, Method 208 [e4](#)
- Weight: 0.001 grams (Approximate)

X2-DFN1010-6

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - NiPdAu Nickel Palladium Gold, Solderable per MIL-STD-202, Method 208 [e4](#)
- Weight: 0.001 grams (Approximate)

X2-DFN1409-6

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - NiPdAu Nickel Palladium Gold, Solderable per MIL-STD-202, Method 208 [e4](#)
- Weight: 0.002 grams (Approximate)

X2-DFN1410-6

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - NiPdAu Nickel Palladium Gold, Solderable per MIL-STD-202, Method 208 [e4](#)
- Weight: 0.002 grams (Approximate)

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