CONFIGURABLE MULTIPLE-FUNCTION GATE

NEW PRODUCT

Description

The 74AUP1G98 is a single, 3-input positive configurable multiple function gate with a standard push-pull output. The output state is determined by eight patterns of 3-bit input. The user can chose the logic functions MUX, AND, OR, NAND, NOR, inverter or non-inverting buffer. All inputs can be connected to ground or Vcc as required.

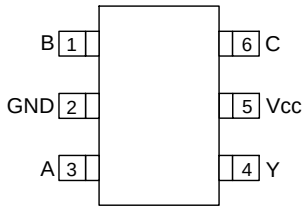
The device is designed for operation with a power supply range of 0.8V to 3.6V.

The inputs are tolerant to 3.6V allowing this device to be used in a mixed voltage environment.

The device is fully specified for partial power down applications using IOFF. The IOFF circuitry disables the output preventing 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.

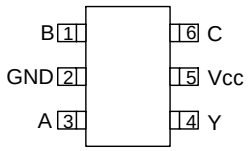
Pin Assignments

(Top View)



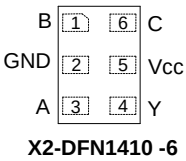
SOT26

(Top View)



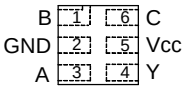
SOT363

(Top View)



X2-DFN1410 -6

(Top View)



X2-DFN1010-6

(Top View)

Future Product

X2-DFN0910-6

Features

- Advanced Ultra Low-Power (AUP) CMOS
- Supply Voltage Range from 0.8V to 3.6V
- ±4mA Output Drive at 3.0V
- Low Static Power Consumption
- I_C < 0.9µA
- Low Dynamic Power Consumption
- C_{PD} = 4.8pF Typical at 3.6V
- Schmitt Trigger Action at All Inputs Make the Circuit Tolerant for Slower Input Rise and Fall Time. The hysteresis is typically 950mV at V_{CC} = 3.0V
- I_{OFF} Supports Partial-Power-Down Mode Operation
- ESD Protection per JESD 22
  - Exceeds 200-V Machine Model (A115)
  - Exceeds 2000-V Human Body Model (A114)
  - Exceeds 1000-V Charged Device Model (C101)
- Latch-Up Exceeds 100mA per JESD 78, Class I
- Standard SOT26 and SOT363 Packages
- Leadless Packages per JESD30E
  - DFN1410 denoted as X2-DFN1410-6
  - DFN1010 denoted as X2-DFN1010-6
  - DFN0910 denoted as X2-DFN0910-6
- **Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

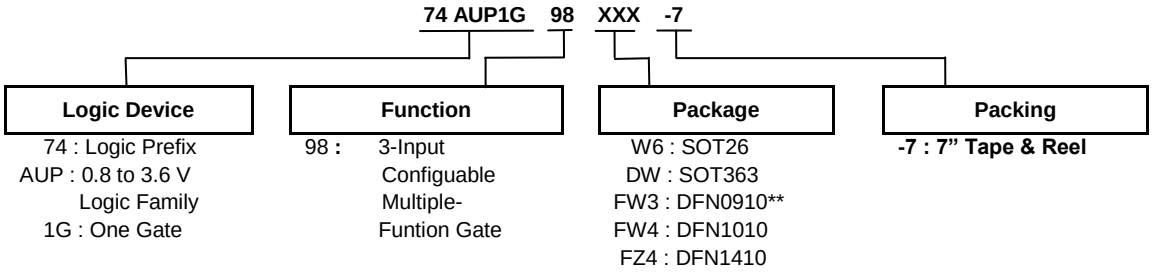
Applications

- Suited for Battery and Low Power Needs
- Voltage Level Shifting
- General Purpose Logic
- Power Down Signal Isolation
- Wide Array of Products such as:
  - PCs, Networking, Notebooks, Netbooks, PDAs
  - Tablet Computers, E-readers
  - Computer Peripherals, Hard Drives, CD/DVD ROMs
  - TVs, DVDs, DVRs, Set-Top Boxes
  - 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) compliant.
2. See http://www.diodes.com/quality/lead_free.html 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.

NEW PRODUCT

Ordering Information



Device	Package Code	Package (Notes 4 & 5)	Package Size	7" Tape and Reel	
				Quantity	Part Number Suffix
74AUP1G98W6-7	W6	SOT26	3.0mm x 2.8mm x 1.2mm 0.95 mm lead pitch	3,000/Tape & Reel	-7
74AUP1G98DW-7	DW	SOT363	2.0mm x 2.0mm x 1.1mm 0.65 mm lead pitch	3,000/Tape & Reel	-7
74AUP1G98FW3-7 **	FW3	X2-DFN0910-6	0.9mm x 1.0mm x 0.35mm 0.3 mm lead pitch	5,000/Tape & Reel	-7
74AUP1G98FW4-7	FW4	X2-DFN1010-6	1.0mm x 1.0mm x 0.4mm 0.35 mm lead pitch	5,000/Tape & Reel	-7
74AUP1G98FZ4-7	FZ4	X2-DFN1410-6	1.4mm x 1.0mm x 0.4mm 0.5 mm lead pitch	5,000/Tape & Reel	-7

Notes: 4. Pad layout as shown on Diodes Inc. suggested pad layout document AP02001, which can be found on our website at http://www.diodes.com/datasheets/ap02001.pdf.
5. The taping orientation is located on our website at http://www.diodes.com/datasheets/ap02007.pdf.
** The X2-DFN0910-6 is a future product.

Pin Descriptions

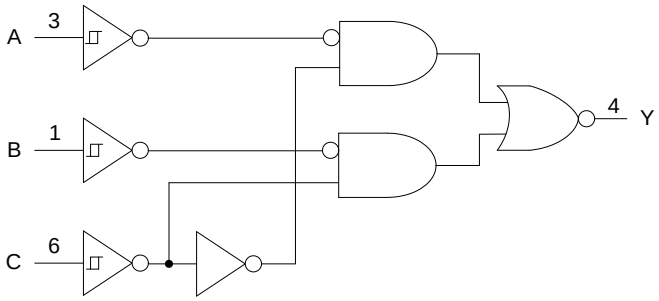
Pin Name	Function
B	Data Input
GND	Ground
A	Data Input
Y	Data Output
V_{CC}	Supply Voltage
C	Data Input

Function Table

Inputs			Output
C	B	A	Y
L	L	L	H
L	L	H	H
L	H	L	L
L	H	H	L
H	L	L	H
H	L	H	L
H	H	L	H
H	H	H	L

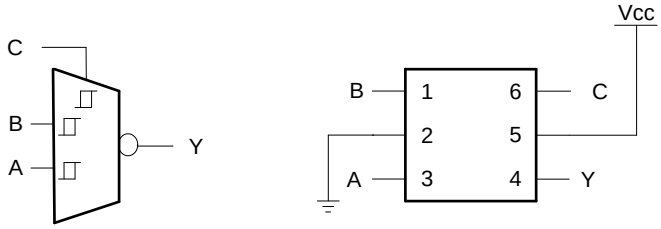
NEW PRODUCT

Logic Diagram

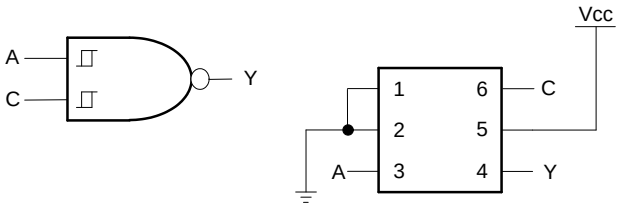


NEW PRODUCT

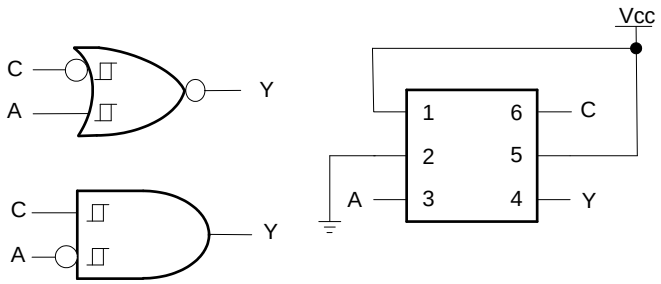
Logic Configurations



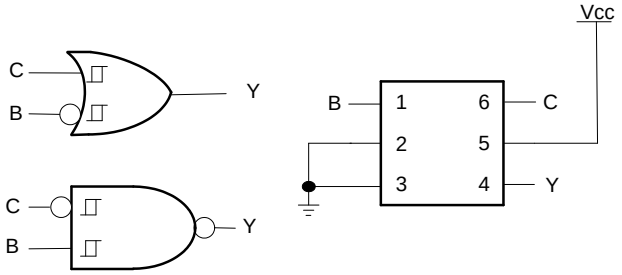
Configuration 1
2 to 1 Data Selector
When C is = L, Y=$\overline{B}$; When C is H, Y=$\overline{A}$



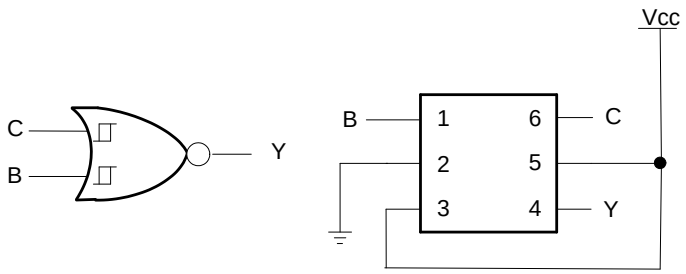
Configuration 2
2-Input NAND Gate
2-Input OR Gate with Both Inputs Inverted



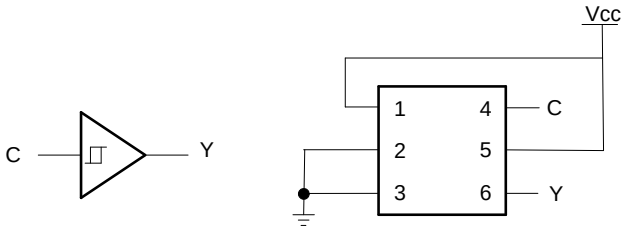
Configuration 3
2-Input NAND Gate with B Input Inverted
2-Input OR Gate with A Input Inverted



Configuration 4
2-Input OR Gate with One Input Inverted
2-Input NAND Gate with One Input Inverted



Configuration 5
2-Input NOR Gate



Configuration 6
Buffer

Function Selection Table	
Logic Function	**Configuration**
2-to-1 Data Selector with inverted output	1
2-Input NAND gate	2
2-Input AND with inverted input	3
2-Input NOR with inverted input	3
2-Input NAND with one inverted input	4
2-Input OR with one inverted input	4
2-Input NOR	5
1-Input Buffer	6

NEW PRODUCT

Absolute Maximum Ratings (Notes 6 & 7)

Symbol	Description	Rating	Unit
ESD HBM	Human Body Model ESD Protection	2	kV
ESD CDM	Charged Device Model ESD Protection	1	kV
ESD MM	Machine Model ESD Protection	200	V
V_{CC}	Supply Voltage Range	-0.5 to +4.6	V
V_I	Input Voltage Range	-0.5 to +4.6	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 (V_O < 0)	-50	mA
I_O	Continuous Output Current (V_O = 0 to V_{CC})	±20	mA
I_{CC}	Continuous Current through V_{CC}	50	mA
I_{GND}	Continuous Current through GND	-50	mA
T_J	Operating Junction Temperature	-40 to +150	°C
T_{STG}	Storage Temperature	-65 to +150	°C

Notes: 6. Stresses beyond the absolute maximum may result in immediate failure or reduced reliability. These are stress values and device operation should be within recommend values.
7. 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 8)

Symbol	Parameter		Min	Max	Unit
V_{CC}	Operating Voltage	-	0.8	3.6	V
V_I	Input Voltage		0	3.6	V
V_O	Output Voltage	Active Mode	0	V_{CC}	V
		Power Down Mode	0	3.6	V
I_{OH}	High-Level Output Current	V_{CC} = 0.8 V	-	-20	µA
		V_{CC} = 1.1 V	-	-1.1	mA
		V_{CC} = 1.4 V	-	-1.7	
		V_{CC} = 1.65 V	-	-1.9	
		V_{CC} = 2.3 V	-	-3.1	
		V_{CC} = 3.0 V	-	-4	
I_{OL}	Low-Level Output Current	V_{CC} = 0.8 V	-	20	µA
		V_{CC} = 1.1 V	-	1.1	mA
		V_{CC} = 1.4 V	-	1.7	
		V_{CC} = 1.65 V	-	1.9	
		V_{CC} = 2.3 V	-	3.1	
		V_{CC} = 3.0 V	-	4	
T_A	Operating Free-Air Temperature	-	-40	+125	°C

Note: 8. Unused inputs should be held at Vcc or Ground.

NEW PRODUCT

Electrical Characteristics

Symbol	Parameter	Test Conditions	Vcc	T_A = +25°C		T_A = -40 to +85°C		Unit
				Min	Max	Min	Max	
V_{T+}	Positive-Going Input Threshold Voltage	-	0.8V	0.3	0.65	0.3	0.7	V
		-	1.1V	0.53	0.9	0.53	0.9	
		-	1.4V	0.74	1.11	0.74	1.11	
		-	1.65V	0.91	1.29	0.91	1.29	
		-	2.3V	1.37	1.77	1.37	1.77	
		-	3.0V	1.88	2.29	1.88	2.29	
V_{T-}	Negative-Going Input Threshold Voltage	-	0.8V	0.1	0.6	0.1	0.6	V
		-	1.1V	0.26	0.65	0.26	0.65	
		-	1.4V	0.39	0.75	0.39	0.75	
		-	1.65V	0.47	0.84	0.47	0.84	
		-	2.3V	0.69	1.04	0.69	1.04	
		-	3.0V	0.88	1.24	0.88	1.24	
ΔV_T	Hysteresis (V_{T+} - V_{T-})	-	0.8V	0.07	0.5	0.07	0.5	V
		-	1.1V	0.08	0.46	0.08	0.46	
		-	1.4V	0.18	0.56	0.18	0.56	
		-	1.65V	0.27	0.66	0.27	0.66	
		-	2.3V	0.53	0.92	0.53	0.92	
		-	3.0V	0.79	1.31	0.79	1.31	
V_{OH}	High-Level Output Voltage	I_{OH} = -20µA	0.8V to 3.6V	V_{CC} – 0.1	-	V_{CC} – 0.1	-	V
		I_{OH} = -1.1mA	1.1V	0.75 x V_{CC}	-	0.7 x V_{CC}	-	
		I_{OH} = -1.7mA	1.4V	1.11	-	1.03	-	
		I_{OH} = -1.9mA	1.65V	1.32	-	1.3	-	
		I_{OH} = -2.3mA	2.3V	2.05	-	1.97	-	
		I_{OH} = -3.1mA		1.9	-	1.85	-	
		I_{OH} = -2.7mA	3V	2.72	-	2.67	-	
		I_{OH} = -4mA		2.6	-	2.55	-	
V_{OL}	Low-Level Input Voltage	I_{OL} = 20µA	0.8V to 3.6V	-	0.1	-	0.1	V
		I_{OL} = 1.1mA	1.1V	-	0.3 x V_{CC}	-	0.3 x V_{CC}	
		I_{OL} = 1.7mA	1.4V	-	0.31	-	0.37	
		I_{OL} = 1.9mA	1.65 V	-	0.31	-	0.35	
		I_{OL} = 2.3mA	2.3V	-	0.31	-	0.33	
		I_{OL} = 3.1mA		-	0.44	-	0.45	
		I_{OL} = 2.7mA	3V	-	0.31	-	0.33	
		I_{OL} = 4mA		-	0.44	-	0.45	
I_I	Input Current	A or B Input V_I =GND to 3.6 V	0V to 3.6V	-	± 0.1	-	± 0.5	µA
I_{OFF}	Power Down Leakage Current	V_I or V_O = 0V to 3.6V	0	-	± 0.2	-	± 0.6	µA
ΔI_{OFF}	Delta Power Down Leakage Current	V_I or V_O = 0V to 3.6V	0V to 0.2 V	-	± 0.2	-	± 0.6	µA
I_{CC}	Supply Current	V_I = GND or V_{CC} I_O=0	0.8V to 3.6V	-	0.5	-	0.9	µA
ΔI_{CC}	Additional Supply Current	One input at V_{CC} – 0.6 V Other inputs at V_{CC} or GND	3.3V	-	40	-	50	µA

NEW PRODUCT

Electrical Characteristics (continued)

Symbol	Parameter	Test Conditions	Vcc	T_A =-40 to +125°C		Unit
				Min	Max	
V_{T+}	Positive-Going Input Threshold Voltage	-	0.8V	0.3	0.7	V
		-	1.1V	0.53	0.92	
		-	1.4V	0.74	1.13	
		-	1.65V	0.91	1.31	
		-	2.3V	1.37	1.8	
		-	3.0V	1.88	2.32	
V_{T-}	Negative-Going Input Threshold Voltage	-	0.8V	0.1	0.6	V
		-	1.1V	0.26	0.65	
		-	1.4V	0.39	0.75	
		-	1.65V	0.47	0.84	
		-	2.3V	0.69	1.04	
		-	3.0V	0.88	1.24	
ΔV_T	Hysteresis (V_{T+} - V_{T-})	-	0.8V	0.07	0.5	V
		-	1.1V	0.08	0.46	
		-	1.4V	0.18	0.56	
		-	1.65V	0.27	0.66	
		-	2.3V	0.53	0.92	
		-	3.0V	0.79	1.31	
V_{OH}	High-Level Output Voltage	I_{OH} = -20µA	0.8V to 3.6V	V_{CC} – 0.11	-	V
		I_{OH} = -1.1mA	1.1V	0.6 x V_{CC}	-	
		I_{OH} = -1.7mA	1.4V	0.93	-	
		I_{OH} = -1.9mA	1.65V	1.17	-	
		I_{OH} = -2.3mA	2.3V	1.77	-	
		I_{OH} = -3.1mA		1.67	-	
		I_{OH} = -2.7mA	3V	2.40	-	
		I_{OH} = -4mA		2.30	-	
V_{OL}	Low-Level Input Voltage	I_{OL} = 20µA	0.8V to 3.6V	-	0.11	V
		I_{OL} = 1.1mA	1.1V	-	0.33 x V_{CC}	
		I_{OL} = 1.7mA	1.4V	-	0.41	
		I_{OL} = 1.9mA	1.65 V	-	0.39	
		I_{OL} = 2.3mA	2.3V	-	0.36	
		I_{OL} = 3.1mA		-	0.50	
		I_{OL} = 2.7mA	3V	-	0.36	
		I_{OL} = 4mA		-	0.50	
I_I	Input Current	A or B Input V_I =GND to 3.6 V	0V to 3.6V	-	± 0.75	µA
I_{OFF}	Power Down Leakage Current	V_I or V_O = 0V to 3.6V	0	-	± 1.0	µA
ΔI_{OFF}	Delta Power Down Leakage Current	V_I or V_O = 0V to 3.6V	0V to 0.2 V	-	± 2.5	µA
I_{CC}	Supply Current	V_I = GND or V_{CC} I_O=0	0.8V to 3.6V	-	1.4	µA
ΔI_{CC}	Additional Supply Current	One input at V_{CC} – 0.6 V Other inputs at V_{CC} or GND	3.3V	-	75	µA

NEW PRODUCT

Package Characteristics

Symbol	Parameter	Package	Test Conditions	Min	Typ.	Max	Unit
θ_{JA}	Thermal Resistance Junction-to-Ambient	SOT26	(Note 9)	-	166	-	°C/W
		SOT363		-	371	-	
		X2-DFN0910-6		-	450	-	
		X2-DFN1010-6		-	445	-	
		X2-DFN1410-6		-	430	-	
θ_{JC}	Thermal Resistance Junction-to-Case	SOT26	(Note 9)	-	46	-	°C/W
		SOT363		-	143	-	
		X2-DFN0910-6		-	255	-	
		X2-DFN1010-6		-	250	-	
		X2-DFN1410-6		-	190	-	

Note: 9. Test condition for each of the 8 package types: Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

Operating Characteristics (@T_A = +25°C, unless otherwise specified.)

Parameter		Test Conditions	Vcc	TYP	Unit
C_{pd}	Power Dissipation Capacitance	f = 1MHz No Load	0.8 V	4	pF
			1.2V ± 0.1V	4	
			1.5V ± 0.1V	4	
			1.8V ± 0.15V	4	
			2.5V ± 0.2V	4.4	
			3.3 ± 0.3V	4.8	
C_I	Input Capacitance	$V_I = V_{CC}$ or GND	0 V or 3.3V	1.1	pF
C_O	Output Capacitance	$V_0 = V_{CC}$ or GND	0 V	2.0	pF

Switching Characteristics

C_L=5pF, See Figure 1

Parameter	From Input	TO OUTPUT	Vcc	T_A = +25°C			T_A = -40°C to +85°C		T_A = -40°C to +125°C		Unit
				Min	TYP	Max	Min	Max	Min	Max	
t_{pd}	A, B, or C	Y	0.8 V	-	28.0	-	-	-	-	-	ns
			1.2 V ± 0.1 V	2.7	6.7	14.6	2.2	15	2.2	15.3	
			1.5 V ± 0.1 V	2	4.8	7.7	1.5	8.3	1.5	8.7	
			1.8 V ± 0.15 V	1.4	4	6.3	0.9	7	0.9	7.4	
			2.5 V ± 0.2 V	1.2	3.2	4.6	0.7	5.2	0.7	5.4	
			3.3 V ± 0.3 V	1	2.9	4	0.5	4.2	0.5	4.4	

NEW PRODUCT

Switching Characteristics (continued)

C_L=10pF, See Figure 1

Parameter	From Input	TO OUTPUT	V_{CC}	T_A = +25°C			T_A = -40°C to +85°C		T_A = -40°C to +125°C		Unit
				Min	TYP	Max	Min	Max	Min	Max	
t_{pd}	A, B, or C	Y	0.8 V	-	32	-	-	-	-	-	ns
			1.2 V ± 0.1 V	3.3	7.6	16.5	3	17.2	3	17.5	
			1.5 V ± 0.1 V	2.7	5.4	8.8	2.8	9.5	2.8	9.9	
			1.8 V ± 0.15 V	2.5	4.6	7.2	2.3	8	2.3	8.4	
			2.5 V ± 0.2 V	2.4	3.8	5.3	2.2	5.9	2.2	6.2	
			3.3 V ± 0.3 V	2.3	3.5	4.7	2	4.9	2	5.2	

C_L=15pF, See Figure 1

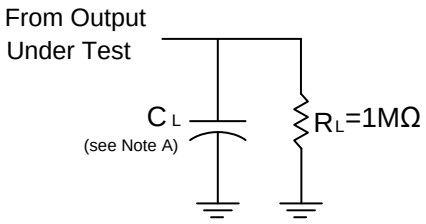
Parameter	From Input	TO OUTPUT	V_{CC}	T_A = +25°C			T_A = -40°C to +85°C		T_A = -40°C to +125°C		Unit
				Min	TYP	Max	Min	Max	Min	Max	
t_{pd}	A, B, or C	Y	0.8 V	-	38	-	-	-	-	-	ns
			1.2 V ± 0.1 V	3.6	8.4	18.4	3.2	19.8	3.2	20	
			1.5 V ± 0.1 V	2.8	6	9.7	2.3	10.5	2.3	11	
			1.8 V ± 0.15 V	2.1	5.1	7.9	1.6	8.9	1.6	9.3	
			2.5 V ± 0.2 V	1.8	4.2	5.9	1.3	6.6	1.3	7	
			3.3 V ± 0.3 V	1.6	3.9	5.2	1.1	5.5	1.1	5.8	

C_L=30pF, See Figure 1

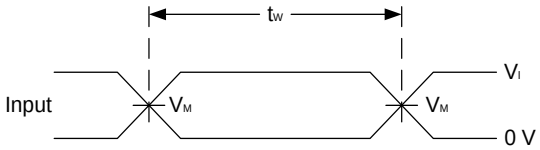
Parameter	From Input	TO OUTPUT	V_{CC}	T_A = +25°C			T_A = -40°C to +85°C		T_A = -40°C to +125°C		Unit
				Min	TYP	Max	Min	Max	Min	Max	
t_{pd}	A, B, or C	Y	0.8 V	-	46	-	-	-	-	-	ns
			1.2 V ± 0.1 V	4.5	10.7	24	4.1	25.1	4.1	25.5	
			1.5 V ± 0.1 V	3.8	7.6	12.3	3.4	13.5	3.4	14.2	
			1.8 V ± 0.15 V	3.1	6.3	10.1	2.6	11.3	2.6	11.9	
			2.5 V ± 0.2 V	2.6	5.3	7.5	2.1	8.4	2.1	8.9	
			3.3 V ± 0.3 V	2.3	5	6.7	1.8	7.1	1.8	7.5	

NEW PRODUCT

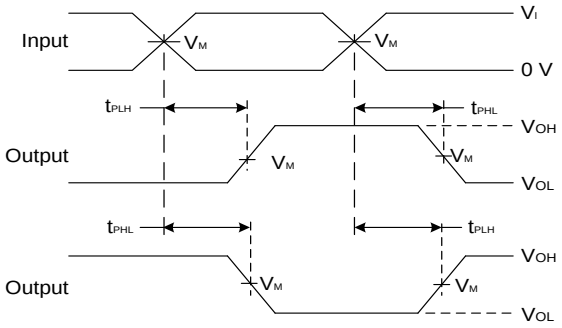
Parameter Measurement Information



V_{CC}	Inputs		V_M	C_L
	V_I	t_r/t_f		
0.8 V	V_{CC}	≤3ns	$V_{CC}/2$	5, 10, 15, 30 pF
1.2V±0.1V	V_{CC}	≤3ns	$V_{CC}/2$	5, 10, 15, 30 pF
1.5V±0.1V	V_{CC}	≤3ns	$V_{CC}/2$	5, 10, 15, 30 pF
1.8V±0.15V	V_{CC}	≤3ns	$V_{CC}/2$	5, 10, 15, 30 pF
2.5V±0.2V	V_{CC}	≤3ns	$V_{CC}/2$	5, 10, 15, 30 pF
3.3V±0.3V	V_{CC}	≤3ns	$V_{CC}/2$	5, 10, 15, 30 pF



Voltage Waveform Pulse Duration



Voltage Waveform Propagation Delay Times Inverting and Non Inverting Outputs

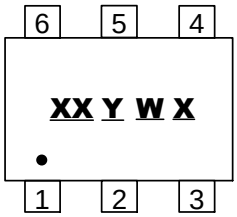
Figure 1. Load Circuit and Voltage Waveforms

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

NEW PRODUCT

Marking Information

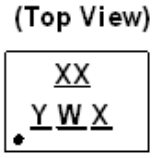
(1) SOT26, SOT363



XX : Identification code
Y : Year 0~9
W : Week : A~Z : 1~26 week;
a~z : 27~52 week; z represents
52 and 53 week
X : A~Z : Internal Code

Part Number	Package	Identification Code
74AUP1G98W6	SOT26	AZ
74AUP1G98DW	SOT363	BY

(2) X2-DFN0910-6, X2-DFN1010-6, X2-DFN1410-6



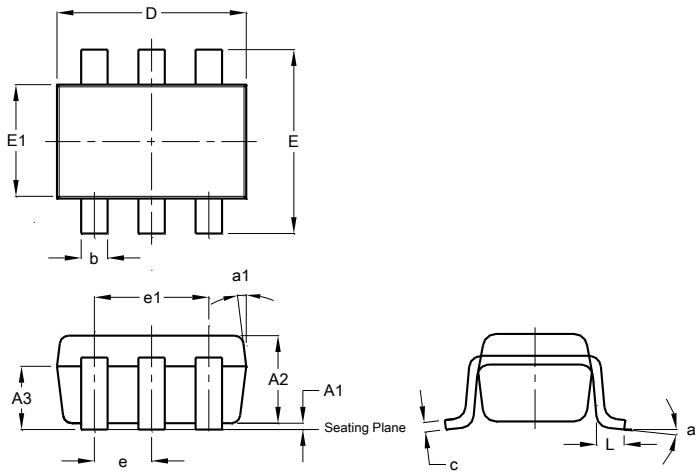
XX : Identification Code
Y : Year : 0~9
W : Week : A~Z : 1~26 week;
a~z : 27~52 week; z represents
52 and 53 week
X : A~Z : Internal code

Part Number	Package	Identification Code
74AUP1G98FW3	X2-DFN0910-6	AZ
74AUP1G98FW4	X2-DFN1010-6	BY
74AUP1G98FZ4	X2-DFN1410-6	NU

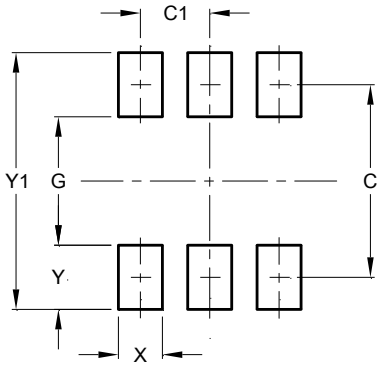
NEW PRODUCT

SOT26 Package Outline Dimensions and Suggested Pad Layout

Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for the latest version.



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			

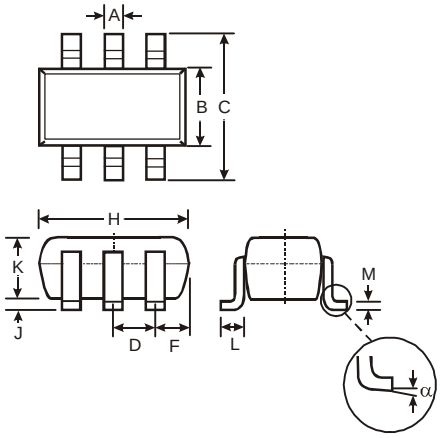


Dimensions	Value (in mm)
C	2.40
C1	0.95
G	1.60
X	0.55
Y	0.80
Y1	3.20

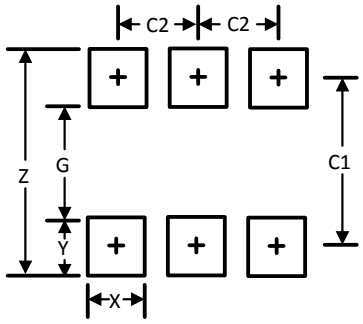
NEW PRODUCT

SOT363 Package Outline Dimensions and Suggested Pad Layout

Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for the latest version.



SOT363			
Dim	**Min**	**Max**	**Typ**
A	0.10	0.30	0.25
B	1.15	1.35	1.30
C	2.00	2.20	2.10
D	0.65 Typ		
F	0.40	0.45	0.425
H	1.80	2.20	2.15
J	0	0.10	0.05
K	0.90	1.00	1.00
L	0.25	0.40	0.30
M	0.10	0.22	0.11
α	0°	8°	-
All Dimensions in mm			

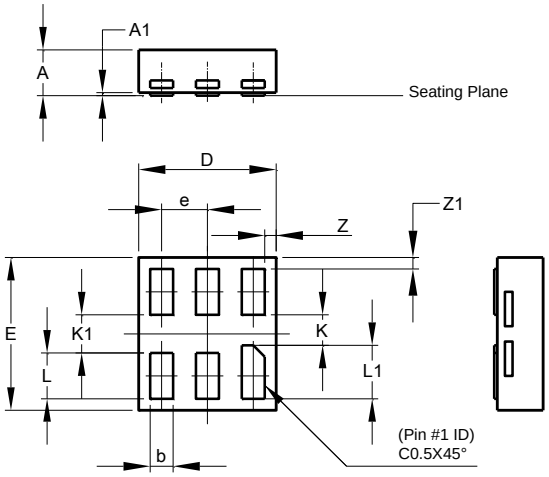


Dimensions	Value (in mm)
Z	2.5
G	1.3
X	0.42
Y	0.6
C1	1.9
C2	0.65

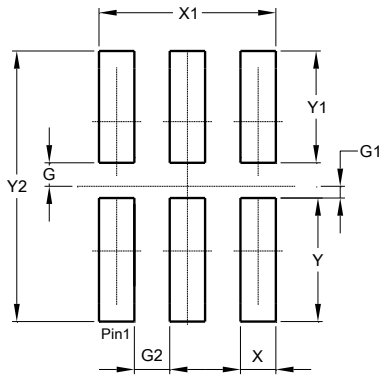
NEW PRODUCT

X2-DFN0910-6 Package Outline Dimensions and Suggested Pad Layout

Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for the latest version.



X2-DFN0910-6			
Dim	**Min**	**Max**	**Typ**
A	-	0.35	0.30
A1	0	0.03	0.02
b	0.10	0.20	0.15
D	0.85	0.95	0.90
E	0.95	1.05	1.00
e	-	-	0.30
K	0.20	-	-
K1	0.25	-	-
L	0.25	0.35	0.30
L1	0.30	0.40	0.35
Z	-	-	0.075
Z1	-	-	0.075
All Dimensions in mm			

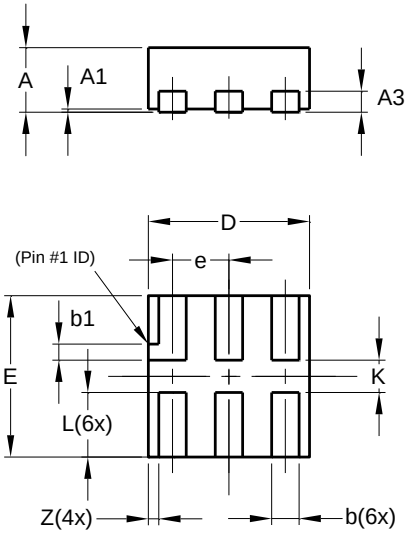


Dimensions	Value (in mm)
G	0.100
G1	0.050
G2	0.150
X	0.150
X1	0.750
Y	0.525
Y1	0.475
Y2	1.150

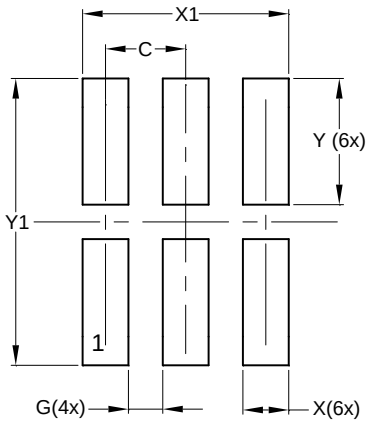
NEW PRODUCT

X2-DFN1010-6 Package Outline Dimensions and Suggested Pad Layout

Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for the latest version.



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			

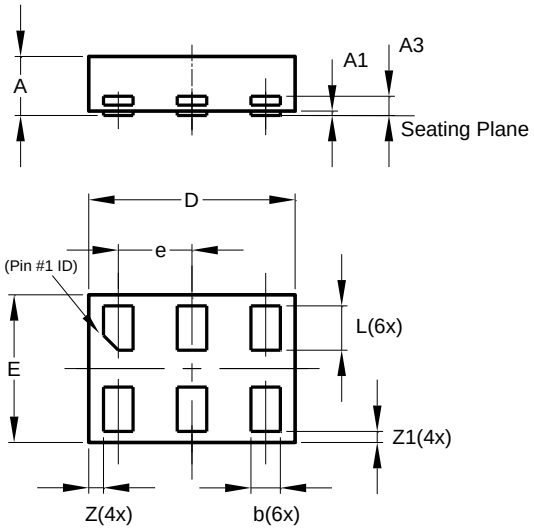


Dimensions	Value (in mm)
C	0.350
G	0.150
X	0.200
X1	0.900
Y	0.550
Y1	1.250

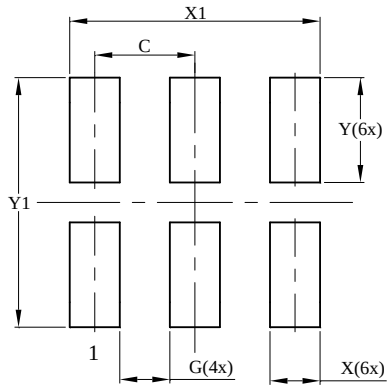
NEW PRODUCT

X2-DFN1410-6 Package Outline Dimensions and Suggested Pad Layout

Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for the latest version.



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			



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

NEW PRODUCT

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