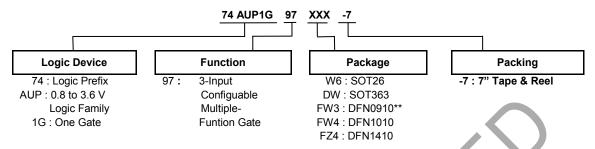


Ordering Information



Device	Dockers Code	Package	Package	7" Tape and Reel		
Device	Package Code	(Notes 4 & 5)	Size	Quantity	Part Number Suffix	
74AUP1G97W6-7	W6	SOT26	3.0mm x 2.8mm x 1.2mm 0.95 mm lead pitch 3,000/Tape & Reel		-7	
74AUP1G97DW-7	DW	SOT363	2.0mm x 2.0mm x 1.1mm 0.65 mm lead pitch	3,000/Tape & Reel	-7	
74AUP1G97FW3-7**	FW3	X2-DFN0910-6	0.9mm x 1.0mm x 0.35mm 0.3 mm lead pitch	5,000/Tape & Reel	-7	
74AUP1G97FW4-7	FW4	X2-DFN1010-6	1.0mm x 1.0mm x 0.4mm 0.35 mm lead pitch	5,000/Tape & Reel	-7	
74AUP1G97FZ4-7	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

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.

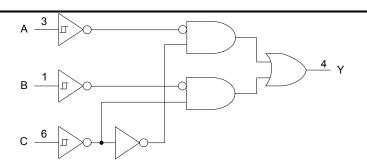
Pin Descriptions

Pin Name	Function
В	Data Input
GND	Ground
Α	Data Input
Y	Data Output
V _{CC}	Supply Voltage
С	Data Input

Function Table

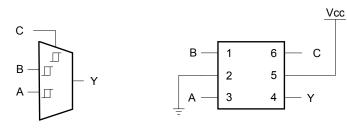
	Inputs						
С	В	Α	Y				
L	L	L	L				
L	L	Н	L				
L	Н	L	Н				
L	Н	Н	Н				
Н	L	L	L				
Н	L	Н	Н				
Н	Н	L	L				
Н	Н	Н	Н				

Logic Diagram

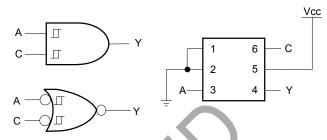




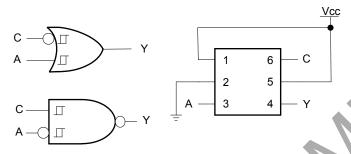
Logic Configurations



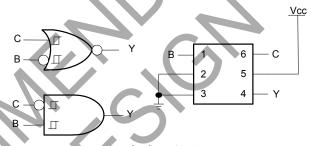
Configuration 1
2 to 1 Data Selector
When C is = L, Y=B; When C is H, Y=A



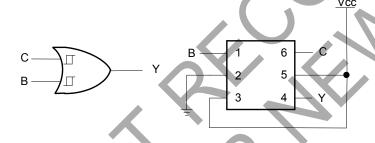
Configuration 2
2-Input AND Gate
2-Input NOR Gate with Both Inputs Inverted



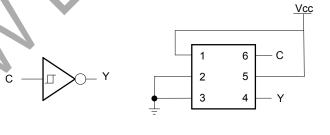
Configuration 3
2-Input NAND Gate with B Input Inverted
2-Input OR Gate with A Input Inverted



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 T	able
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 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
Vcc	Supply Voltage Range	-0.5 to +4.6	V
VI	Input Voltage Range	-0.5 to +4.6	V
Vo	Voltage applied to output in high or low state	-0.5 to V _{CC} +0.5	V
l _{IK}	Input Clamp Current V _I <0	-50	mA
lok	Output Clamp Current (V _O < 0)	-50	mA
Io	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
TJ	Operating Junction Temperature	-40 to +150	°C
T _{STG}	Storage Temperature	-65 to +150	°C

Notes:

Recommended Operating Conditions (Note 8)

Symbol		Parameter	Min	Max	Unit
V _{CC}	Operating Voltage		0.8	3.6	٧
VI	Input Voltage		0	3.6	V
Vo	Output Voltage	Active Mode	0	V _{CC}	V
••0	Catput Voltago	Power Down Mode	0	3.6	V
	Light Loyal Output Officer	V _{CC} = 0.8 V	-	-20	μΑ
		V _{CC} = 1.1 V	-	-1.1	
		V _{CC} = 1.4 V	-	-1.7	
Іон	High-Level Output Current	V _{CC} = 1.65 V	-	-1.9	mA
		V _{CC} = 2.3 V	-	-3.1	
		V _{CC} = 3.0 V	-	-4	
		V _{CC} = 0.8 V	-	20	μA
		V _{CC} = 1.1 V	-	1.1	
	Low Lovel Output Current	V _{CC} = 1.4 V	-	1.7	
lor	Low-Level Output Current	V _{CC} = 1.65 V	-	1.9	mA
		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.

^{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.

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.



Electrical Characteristics

Cume le e l	Deverantes	Took Conditions	Ves	T _A = -	+25°C	T _A = -40	to +85°C	He!4	
Symbol	Parameter	Test Conditions	Vcc	Min	Max	Min	Max	Unit	
		-	0.8V	0.3	0.65	0.3	0.7		
	Positive-Going	-	1.1V	0.53	0.9	0.53	0.9		
\ <i>/</i> _	Input Threshold	-	1.4V	0.74	1.11	0.74	1.11	V	
V_{T+}	•	-	1.65V	0.91	1.29	0.91	1.29	V	
	Voltage	-	2.3V	1.37	1.77	1.37	1.77		
		-	3.0V	1.88	2.29	1.88	2.29		
		-	V8.0	0.1	0.6	0.1	0.6		
	Negative-Going	-	1.1V	0.26	0.65	0.26	0.65		
$V_{T_{-}}$		-	1.4V	0.39	0.75	0.39	0.75	V	
		-	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		
		-	0.8V 1.1V	0.07 0.08	0.5 0.46	0.07 0.08	0.5 0.46		
	Hysteresis	-	1.1V	0.08	0.56	0.08	0.46		
ΔV_T	ΔV_T $(V_{T+} - V_{T-})$	-	1.65V	0.10	0.66	0.10	0.66	V	
		_	2.3V	0.53	0.92	0.53	0.92		
		-	3.0V	0.79	1.31	0.79	1.31		
		I _{OH} = -20μA	0.8V to 3.6V	V _{CC} – 0.1	-	V _{CC} - 0.1	-		
		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	-		
	High-Level	I _{OH} = -1.9mA	1.65V	1.32		1.3	-		
V _{OH}	Output Voltage	I _{OH} = -2.3mA		2.05		1.97	-	V	
		I _{OH} = -3.1mA	2.3V	1.9	1-	1.85	-		
		I _{OH} = -2.7mA	014	2.72	-	2.67	-		
		I _{OH} = -4mA	3V	2.6	-	2.55	-		
		I _{OL} = 20μA	0.8V to 3.6V		0.1	-	0.1		
		I _{OL} = 1.1mA	1.1V	-	0.3 x V _{CC}	1	0.3 x V _{CC}		
		I _{OL} = 1.7mA	1.4V	-	0.31	1	0.37		
V_{OL}	Low-level Input	$I_{OL} = 1.9 mA$	1.65 V	-	0.31	ı	0.35	V	
VOL	Voltage	$I_{OL} = 2.3 \text{mA}$	2.3V	-	0.31	-	0.33	V	
		I _{OL} = 3.1mA	2.50	-	0.44	-	0.45		
		I _{OL} = 2.7mA	917	-	0.31	-	0.33		
		I _{OL} = 4mA	3V	-	0.44	-	0.45		
l _l	Input Current	A or B Input V _I =GND to 3.6 V	0V to 3.6V	-	± 0.1	-	± 0.5	μA	
loff	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 ₁ or V _O = 0V to 3.6V	0V to 0.2 V	-	± 0.2	-	± 0.6	μΑ	
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	μΑ	



Electrical Characteristics (continued)

Comple of	Damamastan	Took Conditions	Vee	T _A = -40 1	to +125°C	l lm:4
Symbol	Parameter	Test Conditions	Vcc	Min	Max	Unit
		-	0.8V	0.3	0.7	
	Positive-Going	-	1.1V	0.53	0.92	
\/-	Input	-	1.4V	0.74	1.13	V
V _{T+}	Threshold	-	1.65V	0.91	1.31	, v
	Voltage	-	2.3V	1.37	1.8	
	_	-	3.0V	1.88	2.32	
		-	V8.0	0.1	0.6	
	Negative-	-	1.1V	0.26	0.65	
V_{T-}	Going Input	-	1.4V	0.39	0.75	V
V -	Threshold	-	1.65V	0.47	0.84	
	Voltage	-	2.3V	0.69	1.04	
		-	3.0V	0.88	1.24	
		-	0.8V	0.07	0.5	
		-	1.1V	0.08	0.46	
ΔV_{T}	Hysteresis	-	1.4V	0.18	0.56	v
Δ.	$(V_{T+} - V_{T-)}$	-	1.65V	0.27	0.66	, \
		-	2.3V	0.53	0.92	
		-	3.0V	0.79	1.31	
		I _{OH} = -20μA	0.8V to 3.6V	V _{CC} - 0.11	-	
		I _{OH} = -1.1mA	1.1V	0.6 x V _{CC}		
		I _{OH} = -1.7mA	1.4V	0.93	4 - /	
.,	High-Level Output Voltage	I _{OH} = -1.9mA	1.65V	1.17	X	V
V _{OH}		I _{OH} = -2.3mA		1.77	-	V
		I _{OH} = -3.1mA	2.3V	1.67	1	
				2.40	-	
		I _{OH} = -2.7mA	3V			
		I _{OH} = -4mA		2.30	-	
		I _{OL} = 20μA	0.8V to 3.6V	-	0.11	
		I _{OL} = 1.1mA	1.1V	1.	0.33 x V _{CC}	
		I _{OL} = 1.7mA	1.4V	-	0.41	
\	Low-Level	I _{OL} = 1.9mA	1.65 V	-	0.39	V
V_{OL}	Input Voltage	I _{OL} = 2.3mA	0.01/	-	0.36	v
		I _{OL} = 3.1mA	2.3V	-	0.50	
		I _{OL} = 2.7mA		-	0.36	
		I _{OL} = 4mA	3V	_	0.50	
I _I	Input Current	A or B Input	0V to 3.6V	-	± 0.75	μA
		V _I =GND to 3.6 V				P ,
loff	Power Down Leakage Current	V _I or V _O = 0V to 3.6V	0	-	± 1.0	μΑ
ΔI_{OFF}	Delta Power Down Leakage Current	V _I or V _O = 0V to 3.6V	0V to 0.2 V	-	± 2.5	μΑ
I _{CC}	Supply Current	$V_I = GND \text{ or } V_{CC}$ $I_O = 0$	0.8V to 3.6V	-	1.4	μΑ
ΔI _{CC}	Additional Supply Current	One input at V _{CC} – 0.6 V Other inputs at V _{CC} or GND	3.3V	-	75	μΑ



Package Characteristics

Symbol	Parameter	Package	Test Conditions	Min	Тур.	Max	Unit
		SOT26		-	166	1	
		SOT363		-	371	1	
θЈА	Thermal Resistance Junction-	X2-DFN0910-6	(Note 9)	-	450	1	°C/W
	to-Ambient	X2-DFN1010-6		-	445	-	
		X2-DFN1410-6		-	430	-	
		SOT26		-	46	-	
		SOT363		-	143	-	
θ_{JC}	Thermal Resistance Junction-	X2-DFN0910-6	(Note 9)	-	255	1	°C/W
	to-Case	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 noted.)

Pa	rameter	Test Conditions	Vcc	ТҮР	Unit
C_{pd}	Power Dissipation Capacitance	f = 1MHz No Load	0.8 V $1.2\text{V} \pm 0.1\text{V}$ $1.5\text{V} \pm 0.1\text{V}$ $1.8\text{V} \pm 0.15\text{V}$ $2.5\text{V} \pm 0.2\text{V}$ $3.3 \pm 0.3\text{V}$	4 4 4 4 4.4 4.8	pF
Cı	Input Capacitance	$V_i = V_{CC}$ or GND	0 V or 3.3V	1.1	pF
Co	Output Capacitance	$V_0 = V_{CC}$ or GND	0 V	2.0	pF

Switching Characteristics

C_L=5pF, See Figure 1

Parameter	From		V ₂ -				$T_A = -40^{\circ}C \text{ to } +85^{\circ}C$		$T_A = -40^{\circ}C \text{ to } +125^{\circ}C$		Unit
	Input	OUTPUT		Min	TYP	Max	Min	Max	Min	Max	Oiiit
)		0.8 V	ı	28	-	-	-	-	-	
	A,		1.2 V ± 0.1 V	2.8	7.5	14.4	2.5	14.8	2.5	15.1	
t _{pd}	В,		1.5 V ± 0.1 V	2.1	4.7	7.6	1.6	8.2	1.6	8.6	ns
τρα	or		1.8 V ± 0.15 V	1.6	3.9	6.2	1.1	6.8	1.1	7.2	
	С		2.5 V ± 0.2 V	1.1	3.2	4.5	0.6	5.1	0.6	5.3	
			3.3 V ± 0.3 V	1	2.9	3.9	0.5	4.1	0.5	4.3	



Switching Characteristics (continued)

C_L=10pF, See Figure 1

Parameter	From	rom TO	V	7	Γ _A = +25°C		T _A = -40°C	to +85°C	T _A = -40°C 1	Unit	
Inp	Input	OUTPUT	V _{CC}	Min	TYP	Max	Min	Max	Min	Max	Unit
A,		0.8 V		32							
	Α,	В, Y	1.2 V ± 0.1 V	3.2	8.4	16.3	2.9	17	2.9	17.3	
	В,		1.5 V ± 0.1 V	2.6	5.3	8.7	2.8	9.4	2.8	9.8	20
t _{pd} or C	or		1.8 V ± 0.15 V	2.5	4.5	7	2.3	7.8	2.3	8.2	ns
	С		2.5 V ± 0.2 V	2.4	3.7	5.2	2.1	5.9	2.1	6.1	
			3.3 V ± 0.3 V	2.3	3.4	4.6	1.9	4.9	1.9	5.1	

C_L=15pF, See Figure 1

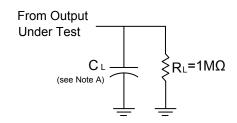
Donomoton.	From	то	.,	7	Γ _A = +25°C		T _A = -40°C	to +85°C	T _A = -40°C	to +125°C	I I mit
Parameter	Input	OUTPUT	Vcc	Min	TYP	Max	Min	Max	Min	Max	Unit
			0.8 V	1	35	-	-			-	
	Α,		1.2 V ± 0.1 V	3.6	9.4	18.2	3.2	19.8	3.2	20	
	В,	V	1.5 V ± 0.1 V	2.9	5.9	9.6	2.5	10.4	2.5	10.9	no
t _{pd}	or	ľ	1.8 V ± 0.15 V	2.3	5	7.8	1.8	8.7	1.8	9.1	ns
	С		2.5 V ± 0.2 V	1.7	4.2	5.8	1.2	6.5	1.2	6.9	
			3.3 V ± 0.3 V	1.4	3.8	5.1	0.9	5.5	0.9	5.7	

C_L=30pF, See Figure 1

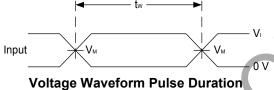
D	From	то		ī	_A = +25°C		T _A = -40°C	to +85°C	T _A = -40°C 1	to +125°C	1114
Parameter	Input	OUTPUT	V _{CC}	Min	TYP	Max	Min	Max	Min	Max	Unit
		V	0.8 V	·	45	1	-	1	-	1	
	A,		1.2 V ± 0.1 V	4.6	12	23.8	4	24.9	4	25.3	
	B,	V	1.5 V ± 0.1 V	3.7	7.4	12.2	3.6	13.3	3.6	14	no
t _{pd}	or		1.8 V ± 0.15 V	3.3	6.3	9.9	2.8	11.1	2.8	11.8	ns
	С		2.5 V ± 0.2 V	2.5	5.3	7.4	2	8.3	2	8.8	
			3.3 V ± 0.3 V	2.1	4.9	6.6	1.6	7	1.6	7.4	

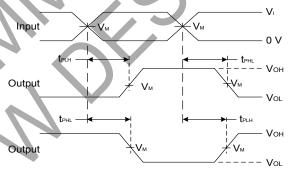


Parameter Measurement Information



V _{CC}	Inputs		V _M	Cr
	Vı	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 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}.

Downloaded from **Arrow.com**.



Marking Information

(1) SOT26, SOT363

5 4

XXYWX

2 3 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
74AUP1G97W6	SOT26	AY
74AUP1G97DW	SOT363	BX

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

(Top View)

XX $\frac{XX}{Y}$: Identification Code $\frac{X}{Y}$: Year: 0~9

₩: Week: A~Z: 1~26 week; a~z: 27~52 week; z represents

52 and 53 week

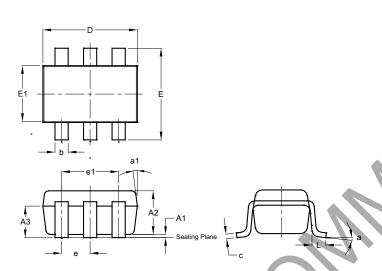
 $X : A \sim Z : Internal code$

Part Number	Package	Identification Code
74AUP1G97FW3	X2-DFN0910-6	AY
74AUP1G97FW4	X2-DFN1010-6	BX
74AUP1G97FZ4	X2-DFN1410-6	NT

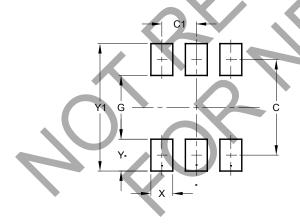


SOT26 Package Outline Dimensions and Suggested Pad Layout

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



SOT26						
Dim	Min	Max	Тур			
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			
С	0.10	0.20	0.15			
D	2.90	3.10	3.00			
е	-	-	0.95			
e1	-	-	1.90			
Е	2.70	3.00	2.80			
E1	1.50	1.70	1.60			
L	0.35	0.55	0.40			
а	-	-	8°			
a1	-	-	7°			
All	Dimen	sions	in mm			

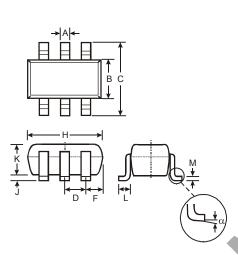


Dimensions	Value (in mm)	
С	2.40	
C1	0.95	
G	1.60	
Х	0.55	
Y	0.80	
V1	3.20	

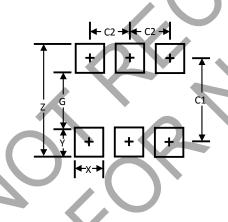


SOT363 Package Outline Dimensions and Suggested Pad Layout

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



SOT363						
Dim	Min	Max	Тур			
Α	0.10	0.30	0.25			
В	1.15	1.35	1.30			
С	2.00	2.20	2.10			
D	0.65 Typ					
F	0.40	0.45	0.425			
Н	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			
М	0.10	0.22	0.11			
α	0°	8°				
All	Dimen	sions i	n mm			



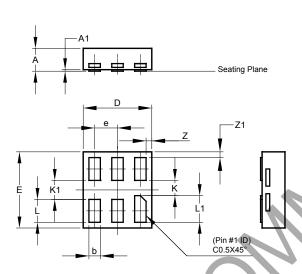
Dimensions	Value (in mm)		
Z	2.5		
G	1.3		
Х	0.42		
Y	0.6		
C1	1.9		
C2	0.65		

Downloaded from **Arrow.com.**

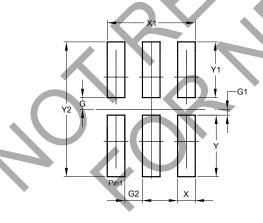


X2-DFN0910-6 Package Outline Dimensions and Suggested Pad Layout

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



	X2-DFN	0910-6				
Dim	Min	Max	Тур			
Α	-	0.35	0.30			
A1	0	0.03	0.02			
b	0.10	0.20	0.15			
۵	0.85	0.95	0.90			
Е	0.95	1.05	1.00			
е	-	-	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			
Z 1	-	-	0.075			
All	All Dimensions in mm					



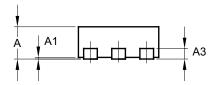
Dimensions	Value (in mm)
G	0.100
G1	0.050
G2	0.150
Х	0.150
X1	0.750
Y	0.525
Y1	0.475
Y2	1.150

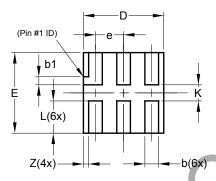
Downloaded from **Arrow.com.**



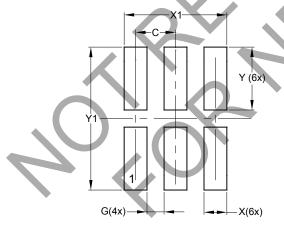
X2-DFN1010-6 Package Outline Dimensions and Suggested Pad Layout

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





			_
	X2-DFN	11010-6	
Dim	Min	Max	Тур
Α	_	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
É	0.95	1.05	1.00
е	-	1	0.35
L	0.35	0.45	0.40
K	0.15		
Z	_	_	0.065
All	Dimens	ions in	mm

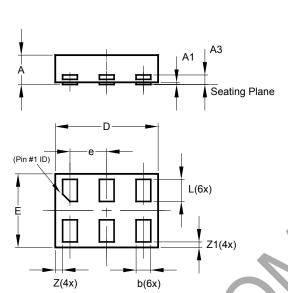


Dimensions	Value (in mm)
С	0.350
G	0.150
X	0.200
X1	0.900
Y	0.550
Y1	1.250

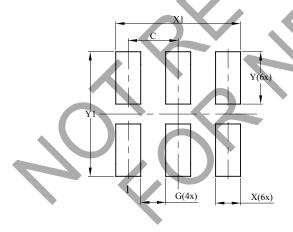


X2-DFN1410-6 Package Outline Dimensions and Suggested Pad Layout

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



X2-DFN1410-6				
Dim	Min	Max	Тур	
Α	_	0.40	0.39	
A1	0.00	0.05	0.02	
A3			0.13	
Ð	0.15	0.25	0.20	
D	1.35	1.45	1.40	
Ш	0.95	1.05	1.00	
a	-		0.50	
L	0.25	0.35	0.30	
Z	_	_	0.10	
Z 1	0.045	0.105	0.075	
All Dimensions in mm				



Dimensions	Value (in mm)
С	0.500
G	0.250
Х	0.250
X1	1.250
Y	0.525
Y1	1.250



IMPORTANT NOTICE

DIODES INCORPORATED MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARDS TO THIS DOCUMENT, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION).

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein. Diodes Incorporated does not assume any liability arising out of the application or use of this document or any product described herein; neither does Diodes Incorporated convey any license under its patent or trademark rights, nor the rights of others. Any Customer or user of this document or products described herein in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on Diodes Incorporated website, harmless against all damages.

Diodes Incorporated does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel. Should Customers purchase or use Diodes Incorporated products for any unintended or unauthorized application, Customers shall indemnify and hold Diodes Incorporated and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.

Products described herein may be covered by one or more United States, international or foreign patents pending. Product names and markings noted herein may also be covered by one or more United States, international or foreign trademarks.

This document is written in English but may be translated into multiple languages for reference. Only the English version of this document is the final and determinative format released by Diodes Incorporated.

LIFE SUPPORT

Diodes Incorporated products are specifically not authorized for use as critical components in life support devices or systems without the express written approval of the Chief Executive Officer of Diodes Incorporated. As used herein:

- A. Life support devices or systems are devices or systems which:
 - 1. are intended to implant into the body, or
 - 2. support or sustain life and whose failure to perform when properly used in accordance with instructions for use provided in the labeling can be reasonably expected to result in significant injury to the user.
- B. A critical component is any component in a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or to affect its safety or effectiveness.

Customers represent that they have all necessary expertise in the safety and regulatory ramifications of their life support devices or systems, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of Diodes Incorporated products in such safety-critical, life support devices or systems, notwithstanding any devices- or systems-related information or support that may be provided by Diodes Incorporated. Further, Customers must fully indemnify Diodes Incorporated and its representatives against any damages arising out of the use of Diodes Incorporated products in such safety-critical, life support devices or systems.

Copyright © 2019, Diodes Incorporated

www.diodes.com