



74AUP2G06

### **DUAL INVERTERS WITH OPEN DRAIN OUTPUTS**

### **Description**

The Advanced Ultra Low Power (AUP) CMOS logic family is designed for low power and extended battery life in portable applications.

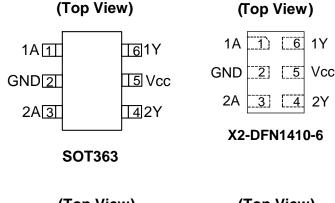
The 74AUP2G06 is composed of two inverters with open drain outputs designed for operation over a power supply range of 0.8V to 3.6V. The device is fully specified for partial power down applications using  $I_{\text{OFF}}$ . The  $I_{\text{OFF}}$  circuitry disables the output preventing damaging current backflow when the device is powered down. The gates perform the positive Boolean function:

$$Y = \overline{A}$$

### **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<sub>C</sub> < 0.9µA</li>
- Low Dynamic Power Consumption
- C<sub>PD</sub> = 1.2pF 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 250mV at Vcc = 3.0V
- I<sub>OFF</sub> 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
- 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)

### **Pin Assignments**



(Top View)	(Top View)
1A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1A [1] 1Y
GND 2 5 Vcc	GND [2] [5] Vcc
2A 3 4 2Y	2A [3] [4] 2Y
X2-DFN1010-6	X2-DFN0910-6

### **Applications**

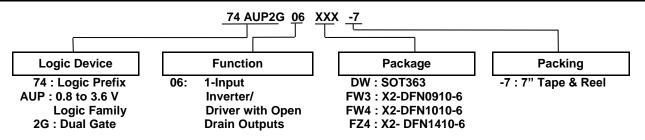
- Suited for battery and low power needs
- Wide array of products such as:
  - PCs, Networking, Notebooks, Netbooks, PDAs
  - Tablet Computers, E-readers
  - Computer Peripherals, Hard Drives, CD/DVD ROM
  - TV, DVD, DVR, Set-Top Box
  - Cell Phones, Personal Navigation / GPS
  - MP3 players ,Cameras, Video Recorders

Notes:

- 1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) 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.



## **Ordering Information**



Part Number	Package	Package	Package	7" Tape and Reel			
Part Number	Code	(Notes 4,5)	Size	Quantity	Part Number Suffix		
74AUP2G06DW-7	DW	SOT363	2.0mm X 2.0mm X 1.1mm 0.65 mm lead pitch	3000/Tape & Reel	-7		
74AUP2G06FW3-7	FW3	X2-DFN0910-6	0.9mm X 1.0mm X 0.35mm 0.35 mm pad pitch	5000/Tape & Reel	-7		
74AUP2G06FW4-7	FW4	X2-DFN1010-6	1.0mm X 1.0mm X 0.4mm 0.35 mm pad pitch	5000/Tape & Reel	-7		
74AUP2G06FZ4-7	FZ4	X2-DFN1410-6	1.4mm X 1.0mm X 0.4mm 0.5 mm pad pitch	5000/Tape & Reel	-7		

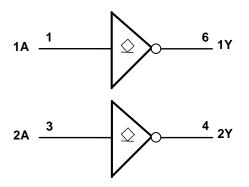
Notes:

- 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.

### **Pin Descriptions**

Pin Name	Pin NO	Function
1A	1	Data Input
GND	2	Ground
2A	3	Data Input
2Y	4	Data Output
V <sub>CC</sub>	5	Supply Voltage
1Y	6	Data Output

### **Logic Diagram**



## **Function Table**

Inputs	Output
nA	nY
Н	L
L	Z



## Absolute Maximum Ratings (Notes 6, 7) (@T<sub>A</sub> = +25°C, unless otherwise specified.)

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 +4.6	V
l <sub>IK</sub>	Input Clamp Current V <sub>I</sub> <0	-50	mA
lok	Output Clamp Current (V <sub>O</sub> < 0)	-50	mA
Ιο	Continuous Output Current (V <sub>O</sub> = 0 to V <sub>CC</sub> )	±20	mA
Icc	Continuous Current through V <sub>CC</sub>	50	mA
I <sub>GND</sub>	Continuous Current through GND	-50	mA
TJ	Operating Junction Temperature	-40 to +150	°C
T <sub>STG</sub>	Storage Temperature	-65 to +150	°C

Notes:

## Recommended Operating Conditions (Note 8) (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Symbol	Pa	rameter	Min	Max	Unit
Vcc	Operating Voltage	_	0.8	3.6	V
VI	Input Voltage		0	3.6	V
Vo	Output Voltage		0	3.6	V
		V <sub>CC</sub> = 0.8V	_	20	μΑ
	Lavel and Output Correct	V <sub>CC</sub> = 1.1V	_	1.1	
		V <sub>CC</sub> = 1.4V	_	1.7	
I <sub>OL</sub>	Low-Level Output Current	V <sub>CC</sub> = 1.65V	_	1.9	mA
		V <sub>CC</sub> = 2.3V	_	3.1	
		$V_{CC} = 3.0V$	_	4	
Δt/ΔV	Input Transition Rise or Fall Rate	$V_{CC} = 0.8V \text{ to } 3.6V$	_	200	ns/V
TA	Operating Free-Air Temperature		-40	+125	°C

Note:

8. Unused inputs should be held at  $V_{\text{CC}}$  or Ground.

<sup>6.</sup> 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.

<sup>7.</sup> 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** (@ $T_A = +25$ °C, unless otherwise specified.)

Symbol	Parameter	Test Conditions	V <sub>CC</sub>	T <sub>A</sub> = -	+25°C	$T_A = -40$	to +85°C	Unit	
Syllibol	Farameter	rest Conditions	VCC	Min	Max	Min	Max	Onit	
		_	0.8V to 1.65V	0.80 X V <sub>CC</sub>	_	0.80 X V <sub>CC</sub>	_		
ViH	High-Level Input	_	1.65V to 1.95V	0.65 X V <sub>CC</sub>	_	0.65 X V <sub>CC</sub>	_	V	
VIH	Voltage	_	2.3V to 2.7V	1.6	_	1.6		V	
		_	3.0V to 3.6V	2.0	_	2.0			
		_	0.8V to 1.65V	_	0.30 X V <sub>CC</sub>	_	0.30 X V <sub>CC</sub>		
VII	Low-Level Input	_	1.65V to 1.95V	_	0.35 X V <sub>CC</sub>	_	0.35 X V <sub>CC</sub>	V	
V IL	- Voltage	_	2.3V to 2.7V	_	0.7	_	0.7	v	
		_	3.0V to 3.6V	_	0.9	_	0.9		
		$I_{OL} = 20\mu A$	0.8V to 3.6V	_	0.1	_	0.1		
		I <sub>OL</sub> = 1.1mA	1.1V	_	0.3 X V <sub>CC</sub>	_	0.3 X V <sub>CC</sub>		
		$I_{OL} = 1.7 \text{mA}$	1.4V	_	0.31	_	0.37		
.,	Low-Level Output	I <sub>OL</sub> = 1.9mA	1.65V	_	0.31	_	0.35	V	
$V_{OL}$	Voltage	I <sub>OL</sub> = 2.3mA	0.0)/	_	0.31	_	0.33	V	
		I <sub>OL</sub> = 3.1mA	2.3V	_	0.44	_	0.45		
		$I_{OL} = 2.7 \text{mA}$	01/	_	0.31	_	0.33		
		I <sub>OL</sub> = 4mA	3V	_	0.44	_	0.45		
II	Input Current	A or B Input, $V_1 = GND$ to 3.6V	0V to 3.6V	_	±0.1	_	±0.5	μA	
l <sub>OZ</sub>	Z State Leakage Current	$V_0 = 3.6V, V_i = 3.6V$	3.6V	_	±0.1	_	±0.5	μΑ	
loff	Power Down Leakage Current	$V_I$ or $V_O = 0V$ to 3.6V	0V	_	±0.2	_	±0.6	μΑ	
Δl <sub>OFF</sub>	Delta Power Down Leakage Current	$V_I$ or $V_O = 0V$ to 3.6V	0V to 0.2V	_	±0.2	_	±0.6	μΑ	
Icc	Supply Current	$V_I = GND \text{ or } V_{CC}, I_O = 0$	0.8V to 3.6V	_	0.5	_	0.9	μA	
ΔI <sub>CC</sub>	Additional Supply Current	One input at V <sub>CC</sub> -0.6V Other inputs at V <sub>CC</sub> or GND	3.3V		40	_	50	μΑ	



## **Electrical Characteristics** (@ $T_A = +25$ °C, unless otherwise specified.)

Symbol	Parameter	Test Conditions	Vcc	T <sub>A</sub> = -40°C	to +125°C	Unit
Syllibol	Farameter	Test Conditions	VCC	Min	Max	Offic
		_	0.8V to 1.65V	0.80 X V <sub>CC</sub>	_	
VIH	High-Level Input Voltage	_	1.65V to 1.95V	0.70 X V <sub>CC</sub>	_	V
VIH	i ligh-Level input voltage	_	2.3V to 2.7V	1.6		v
		_	3.0V to 3.6V	2.0		
		_	0.8V to 1.65V	_	0.25 X V <sub>CC</sub>	
VII	Low-Level Input voltage	_	1.65V to 1.95V	_	0.30 X V <sub>CC</sub>	V
V IL	— —		2.3V to 2.7V	_	0.7	v
		_	3.0V to 3.6V	_	0.9	
		I <sub>OL</sub> = 20μA	0.8V to 3.6V	_	0.11	
	Low-Level Output Voltage	$I_{OL} = 1.1 \text{mA}$	1.1V	- 0.33 X V <sub>C0</sub>		
		$I_{OL} = 1.7 \text{mA}$	1.4V	_	0.41	
.,		I <sub>OL</sub> = 1.9mA	1.65V	_	0.39	V
V <sub>OL</sub>	Low-Level Output Voltage	$I_{OL} = 2.3 \text{mA}$	2.3V	_	0.36	
		I <sub>OL</sub> = 3.1mA	2.31	_	0.50	
		$I_{OL} = 2.7 \text{mA}$	3V	_	0.36	
		$I_{OL} = 4mA$	3V	_	0.50	
l <sub>l</sub>	Input Current	A or B Input, V <sub>I</sub> = GND to 3.6V	0V to 3.6V	_	± 0.75	μΑ
l <sub>OZ</sub>	Z State Leakage Current	V <sub>O</sub> = 3.6V, V <sub>i</sub> = 3.6V	3.6V	_	± 0.75	μΑ
I <sub>OFF</sub>	Power Down Leakage Current	$V_I$ or $V_O = 0V$ to 3.6V	0V	_	± 0.75	μA
ΔI <sub>OFF</sub>	Delta Power Down Leakage Current	$V_I$ or $V_O = 0V$ to 3.6V	0V to 0.2V	_	± 2.5	μΑ
Icc	Supply Current	$V_I = GND \text{ or } V_{CC}, I_O = 0$	0.8V to 3.6V	_	1.4	μA
ΔI <sub>CC</sub>	Additional Supply Current	Input at V <sub>CC</sub> -0.6V Other inputs at V <sub>CC</sub> or GND	3.3V	_	75	μΑ

# Operating Characteristics (@T<sub>A</sub> = +25°C, unless otherwise specified.)

	Parameter Test Conditions		V <sub>CC</sub>	Тур	Unit
			0.8V	0.5	
			1.2V ± 0.1V	0.6	
C	Power Dissipation Capacitance	f = 1MHz	1.5V ± 0.1V	0.7	pF
$C_{\sf pd}$		No Load	1.8V ± 0.15V	0.7	
			2.5V ± 0.2V	1.0	
			3.3V ± 0.3V	1.2	
Cı	Input Capacitance	V <sub>I</sub> = V <sub>CC</sub> or GND	0V or 3.3V	2.0	pF
Co	Output Capacitance	V <sub>O</sub> = V <sub>CC</sub> or GND	0V	2.0	pF



# **Switching Characteristics**

 $C_L = 5pF$  see Figure 1

Parameter	From		· Voc		T <sub>A</sub> = +25°C			$T_A = -40^{\circ}C \text{ to } +85^{\circ}C$		T <sub>A</sub> = -40°C to +125°C		
1 drameter	Input	OUTPUT	V CC	Min	Тур	Max	Min	Max	Min	Max	Unit	
			V8.0	1	12.8	_	_	_	_	_		
	۸		1.2V ± 0.1V	2.6	5.8	11.3	2.3	12.5	2.3	15.9		
_		V	1.5V ± 0.1V	1.8	3.6	6.4	1.6	7.4	1.6	8.2	no	
t <sub>pd</sub>	Α	Ť	1.8V ± 0.15V	1.5	2.9	5	1.4	5.9	1.4	6.5	ns	
				2.5V ± 0.2V	1.2	2.4	3.9	1.1	4.5	1.1	5	
				$3.3V \pm 0.3V$	0.9	3	3.5	8.0	3.9	0.8	4.3	

C<sub>L</sub> = 10pF see Figure 1

Doromotor	From	то	V		T <sub>A</sub> = +25°C	;	T <sub>A</sub> = -40°0	C to +85°C	T <sub>A</sub> = -40°C	to +125°C	Unit	
Parameter Input	OUTPUT	V <sub>CC</sub>	Min	Тур	Max	Min	Max	Min	Max	Unit		
			V8.0	_	14.5	_	_	_	_	_		
		A Y	1.2V ± 0.1V	3.1	7	13.4	2.9	15.1	2.9	19.2		
4	۸		1.5V ± 0.1V	2.3	4.8	7.5	2.1	8.7	2.1	10.5	200	
t <sub>pd</sub>	A		1.8V ± 0.15V	2	3.8	4.8	1.8	7	1.8	7.7	ns	
				2.5V ± 0.2V	1.6	3.1	4.6	1.5	5.4	1.5	6	
				$3.3V \pm 0.3V$	1.2	4.3	4.9	1.1	5.4	1.1	5.9	

C<sub>L</sub> = 15pF see Figure 1

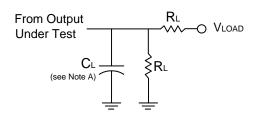
Parameter	From	rom TO	V		T <sub>A</sub> = +25°C		$T_A = -40^{\circ}C \text{ to } +85^{\circ}C$		$T_A = -40^{\circ}C \text{ to } +125^{\circ}C$		Unit
I arameter Ir	Input	OUTPUT	V <sub>CC</sub>	Min	Тур	Max	Min	Max	Min	Max	Oilit
			V8.0	_	16.2	_	_	_	_	_	
	•		1.2V ± 0.1V	3.5	8.2	14.3	3.3	17.4	3.3	22.5	
			1.5V ± 0.1V	2.6	6.2	8.6	2.4	10.5	2.4	13.7	no
t <sub>pd</sub>	Α	1	1.8V ± 0.15V	2.3	5	6.7	2.1	8	2.1	9.8	ns
			2.5V ± 0.2V	2.1	3.9	5.1	1.8	6.1	1.8	6.8	1
			$3.3V \pm 0.3V$	1.6	5.6	6.4	1.4	7.1	1.4	7.8	1

 $C_L = 30pF$  see Figure 1

Parameter	From	то	V	$T_A = +25^{\circ}C$		$T_A = -40^{\circ}\text{C to } +85^{\circ}\text{C}$ $T_A = -40^{\circ}\text{C to } +125^{\circ}\text{C}$			Unit		
rarannetei	Input	OUTPUT	V <sub>CC</sub>	Min Typ Max M		Min	Min Max	Min	Max	JIIII	
		Δ	V8.0	_	19.8	_	_	_	_	_	
			1.2V ± 0.1V	4.8	9.8	18.4	4.4	18.4	4.4	25.8	
	۸		1.5V ± 0.1V	3.6	8.2	13.9	3.2	13.9	3.2	18	
t <sub>pd</sub>	Α	Ť	1.8V ± 0.15V	3.2	7.8	12.2	2.9	12.2	2.9	15.2	ns
			2.5V ± 0.2V	2.4	7.5	9.9	2.6	9.9	2.6	11.4	
			3.3V ± 0.3V	1.8	9.2	10.6	2.1	11.6	2.1	12.8	

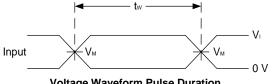


### **Parameter Measurement Information**

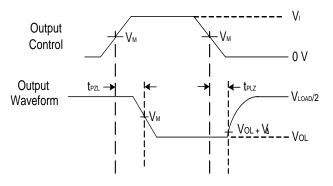


TEST	Condition
t <sub>PLZ</sub> (See Notes D & E)	Vload
t <sub>PZL</sub> (See Notes D & F)	Vload

V	Inp	uts	V	V		В	VΔ
V <sub>CC</sub>	VI	t <sub>r</sub> /t <sub>f</sub>	V <sub>M</sub>	V <sub>LOAD</sub>	CL	$R_L$	VΔ
0.8V	Vcc	≤3 ns	V <sub>CC</sub> /2	2 X V <sub>CC</sub>	5, 10, 15, 30pF	5kΩ	0.1V
1.2V±0.1V	Vcc	≤3 ns	V <sub>CC</sub> /2	2 X V <sub>CC</sub>	5, 10, 15, 30pF	5kΩ	0.1V
1.5V±0.1V	Vcc	≤3 ns	V <sub>CC</sub> /2	2 X V <sub>CC</sub>	5, 10, 15, 30pF	5kΩ	0.15V
1.8V±0.15V	Vcc	≤3 ns	V <sub>CC</sub> /2	2 X V <sub>CC</sub>	5, 10, 15, 30pF	5kΩ	0.15V
2.5V±0.2V	Vcc	≤3 ns	V <sub>CC</sub> /2	2 X V <sub>CC</sub>	5, 10, 15, 30pF	5kΩ	0.15V
3.3V±0.3V	Vcc	≤3 ns	V <sub>CC</sub> /2	2 X V <sub>CC</sub>	5, 10, 15, 30pF	5kΩ	0.3V







**Voltage Waveform Propagation Delay Times** 

Figure 1 Load Circuit and Voltage Waveforms

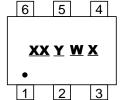
Notes:

- A. Includes test lead and test apparatus capacitance.B. All pulses are supplied at pulse repetition rate ≤ 10MHz.
- C. The inputs are measured one at a time with one transition per measurement.
- D. For the open drain device  $t_{PLZ}$  and  $t_{PZL}$  are the same as  $t_{PD}$ .
- E. t<sub>PZL</sub> is measured at V<sub>M</sub>.
- D.  $t_{PLZ}$  is measured at  $V_{OL}$  + $V_{\Delta}$ .



## **Marking Information**

(1) 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	
74AUP2G06DW-7	SOT363	SN	

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

(Top View)

XX  XX: Identification Code

 $\overline{\underline{Y}}$ : Year:  $0\sim9$ 

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

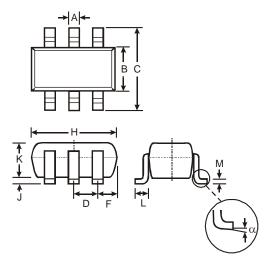
52 and 53 week X: A~Z: Internal code

Part Number	Package	Identification Code
74AUP2G06FZ4	X2-DFN1410-6	RN
74AUP2G06FW4	X2-DFN1010-6	SN
74AUP2G06FW3	X2-DFN0910-6	MN

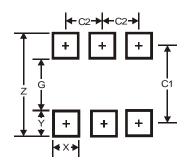


## SOT363 Package Outline Dimensions and Suggested Pad Layout

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



	SOT363						
Dim	Min	Max	Тур				
Α	0.10	0.30	0.25				
В	1.15	1.35	1.30				
C	2.00	2.20	2.10				
D	0.65 Typ						
F	0.40	0.45	0.425				
Н	1.80	2.20	2.15				
7	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				

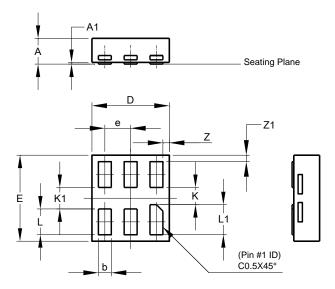


Dimensions	Value (in mm)
Z	2.5
G	1.3
Х	0.42
Y	0.6
C1	1.9
C2	0.65

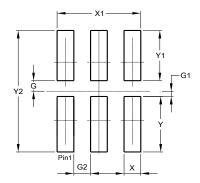


# X2-DFN0910-6 Package Outline Dimensions and Suggested Pad Layout

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



<b>)</b>	X2-DFN0910-6						
Dim	Min	Max	Тур				
Α	-	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				
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				
<b>Z</b> 1	-	-	0.075				
All D	imensi	ons in r	nm				

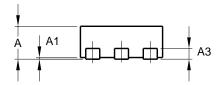


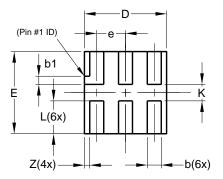
Dimensions	Value (in mm)
G	0.100
G1	0.050
G2	0.150
X	0.150
X1	0.750
Υ	0.525
Y1	0.475
Y2	1.150



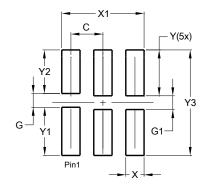
## X2-DFN1010-6 Package Outline Dimensions and Suggested Pad Layout

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





	X2-DFN1010-6						
Dim	Min	Max	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				
Е	0.95	1.05	1.00				
е	_	_	0.35				
L	0.35	0.45	0.40				
K	0.15		_				
Z			0.065				
All	Dimen	sions	in mm				

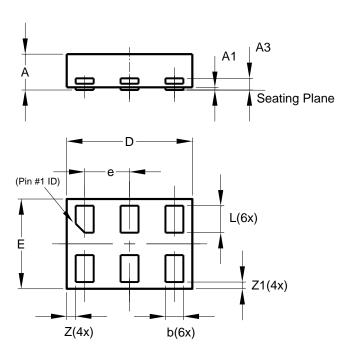


Dimensions	Value (in mm)	
С	0.350	
G	0.150	
G1	0.150	
Х	0.200	
X1	0.900	
Υ	0.500	
Y1	0.525	
Y2	0.475	
Y3	1.150	

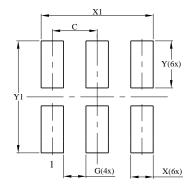


## X2-DFN1410-6 Package Outline Dimensions and Suggested Pad Layout

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				
b	0.15	0.25	0.20				
D	1.35	1.45	1.40				
Е	0.95	1.05	1.00				
е			0.50				
L	0.25	0.35	0.30				
Z			0.10				
<b>Z</b> 1	0.045	0.105	0.075				
All	Dimens	ions 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 © 2014, Diodes Incorporated

www.diodes.com

74AUP2G06 13 of 13 November 2014
Document number: DS35510 Rev. 5 - 2 Downloaded From Oneyac.com

Oneyac.com

# 单击下面可查看定价,库存,交付和生命周期等信息

>>Diodes Incorporated(达迩科技(美台))