

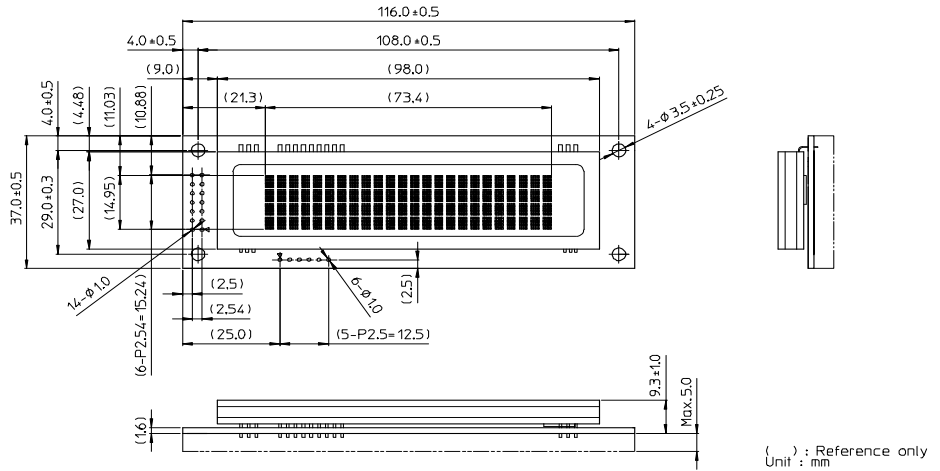
# CU24043-Y1A

## SIMPLIFIED DATASHEET

### Features

24 character x 4 line display.  
Compact, but capable of displaying large amount of text.

### Physical dimension



( ) : Reference only  
Unit : mm

### Specifications

#### Electrical Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Power supply Voltage	VCC	4.75	5.00	5.25	VDC	-

#### Electrical Characteristics

Parameter	Symbol	Min.	Typ.	#1: Brightness 100%		#2: Brightness 200%	
				Max.	Unit	Max.	Unit
<b>'L' Logic Input Current</b>							
D0-D7, /WR, /RESET	IIL1	-	-	-0.15	mA	VIN=0V	
SIN, SCK	IIL2	-	-	-0.55	mA	VIN=0V	
<b>'H' Logic Input Current</b>							
D0-D7, SIN, SCK	I IH1	-	-	5.0	μA	VIN=5V	
/WR, /RESET	I IH2	-	-	0.25	μA	VIN=5V	
<b>'L' Logic Input Voltage</b>							
D0-D7, /WR, SIN, SCK	VIL1	0	-	0.2VCC	VDC	-	
/RESET	VIL2	0	-	0.8	VDC	-	
<b>'H' Logic Input Voltage</b>							
D0-D7, /WR, /RESET, SIN, SCK	VIH	0.8VCC	-	VCC	VDC	-	
<b>'L' Logic Output Voltage</b>							
PBUSY	VOL1	-	-	0.1	VDC	IOL=50 μA	
SBUSY	VOL2	-	-	0.45	VDC	IOL=200 μA	
<b>'H' Logic Output Voltage</b>							
PBUSY	VOH1	VCC-0.1	-	-	VDC	IOH=-50 μA	
SBUSY	VOH2	VCC-0.5	-	VCC	VDC	IOH=-200 μA	
Power Supply Current #1	ICC1-1	-	220	280	mADC	Display ON	
Power Supply Current #1	ICC2-1	-	190	240	mADC	Display OFF	
Power Supply Current #2	ICC1-2	-	280	350	mADC	Display ON	
Power Supply Current #2	ICC2-2	-	220	280	mADC	Display OFF	
Power Supply Current 3	ICC3	-	25	35	mADC	Disp. Pwer OFF	
Power Consumption #1		-	1.1	1.4	W	Display ON	
Power Consumption #2		-	1.4	1.75	W	Display ON	

#### Optical Characteristics

Parameter	#1: Brightness 100%		#2: Brightness 200%	
	Min.	Typ.	Min.	Typ.
Luminance	350 cd/m <sup>2</sup> Min.		2000 cd/m <sup>2</sup> Typ.	
Color of illumination	Green (Blue-Green)			

#### Environmental Conditions

Parameter	Condition
Operating Temperature	-40 ~ +85 degrees celsius
Storage Temperature	-40 ~ +85 degrees celsius
Operating Humidity	20 ~ 80% R.H. (non-condensing)
Storage Humidity	20 ~ 80% R.H. (non-condensing)
Vibration (Non operation)	10-55-10Hz, all amplitude 1mm, 30 minutes, X-Y-Z
Shock (Non operation)	392m/s <sup>2</sup> (40G) 9ms X-Y-Z, 3 times each direction

#### Physical Specifications

Parameter	Value	Notes
Number of Char.	96 (24characters x 4 lines)	
Built-in Fonts	5 x 8 ANK, International font	*ANK(Alphabet, Numeric, Kana)
Display Area	73.4 x 14.95 mm (X x Y)	
Character Size	2.1 x 3.34 mm (X x Y)	
Character Pitch	3.1 mm	
Line pitch	3.87 mm	
Weight	About 48 g	

#### Interface

Parallel (CMOS), Sync/Asynchronous Serial (CMOS)

#### Pin Assignment (Parallel)

Pin No.	Signal	Pin No.	Signal
1	GND	2	Vcc
3	PBUSY	4	/RESET
5	/WR	6	NC
7	D0(LSB)	8	D1
9	D2	10	D3
11	D4	12	D5
13	D6	14	D7(MSB)

#### (Serial)

Pin No.	Signal	Pin No.	Signal	Baud Rate Setting
1	Vcc	1	Vcc	9600bps
2	SIN	2	SIN	19200bps
3	GND	3	GND	38400bps*
4	SBUSY	4	SBUSY	115200bps
5	SCK	5	NC	(*:Default setting)
6	/RESET	6	/RESET	

#### Functions

Parameter	Function
Highlight Function	Highlight Function
Font Magnification	Font Magnification
Horizontal scroll mode	Horizontal scroll mode
Blink ON/OFF	Blink ON/OFF
Power save mode	Power save mode
Screen saver	Screen saver
Cursor, Underline ON/OFF	Cursor, Underline ON/OFF
User Font function	User Font function
etc.	etc.

