

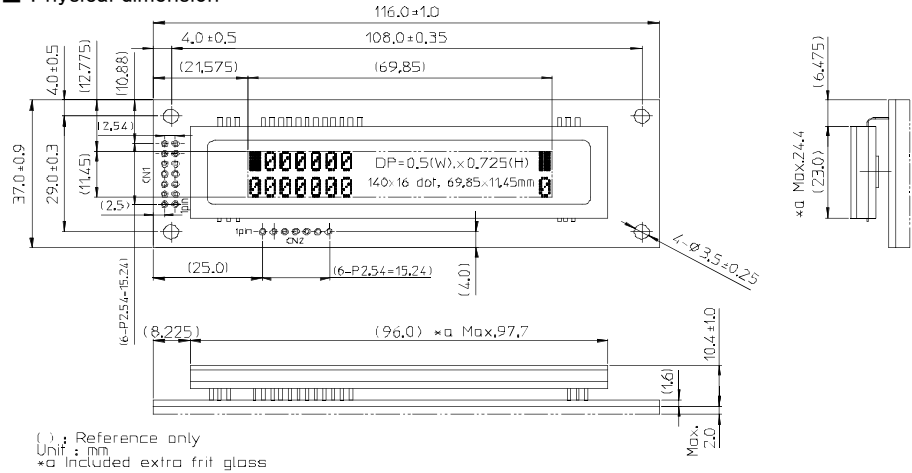
GU140X16G-7000B

SIMPLIFIED DATASHEET

Features

VFD module with same size and shape as LCD module. LED backlight models are also available, for additional display effect.

Physical dimension



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.	Max.	Unit	Condition
'L' Logic Input Current						
D0-D7,/WR,/RD	IIL1	-	-	-0.15	mA	VIN=0V
/RESET	IIL2	-	-	-0.6	mA	VIN=0V
'H' Logic Input Current						
D0-D7,/WR,/RD,/RESET	IIH	-	-	1.0	μADC	VIN=5V
Logic Input Voltage	VIH	0.8VCC	-	VCC	VDC	-
D0-D7,/WR,/RD,/RESET	VIL	0	-	0.2VCC	VDC	-
Logic Output Voltage	VOH	3.8	-	VCC	VDC	IOH=-1.5mA
D7(Busy flag), PBUSY	VOL	0	-	0.6	VDC	IOL=1.6mA
Logic input resistance						
SIN	RIN	3	-	-	KΩ	-
Logic Input Voltage	VIH	3.0	-	+15	VDC	-
SIN	VIL	-15	-	0.5	VDC	-
Logic Output Voltage	VOH	4.0	-	VCC	VDC	RL=3KΩ
SBUSY	VOL	0	-	0.5	VDC	RL=3KΩ
Power Supply Current 1	ICC-1	-	240	300	mADC	All dots ON
Power Supply Current 2	ICC-2	-	200	250	mADC	All dots OFF
Power Supply Current 3	ICC-3	-	12	15	mADC	Display power OFF
Power Consumption		-	1.2	1.5	W	All dots ON

Optical Specifications

Parameter	
Luminance	350 cd/m ² Min. (700 cd/m ² Typ.)
Color of illumination	Green (Blue-Green)

Environmental Specifications

Parameter	
Operating Temperature	-40 ~ +85 degrees celsius
Storage Temperature	-60 ~ +85 degrees (Under 168 hours)/-40 ~ +85 degrees (Or more)
Operating Humidity	20 ~ 80% R.H. (non-condensing)
Storage Humidity	20 ~ 80% R.H. (non-condensing)
Vibration (non-operating)	10-55-10Hz, all amplitude 1mm, 30 minutes, X-Y-Z
Shock (non-operating)	392m/s ² (40G) 9ms X-Y-Z, 3 times each direction

Physical Specifications

Parameter	
Number of Dots	2,240 (140 x 16)
Display Area	69.85 mm x 11.45 mm
Dot Size (X x Y)	0.350 mm x 0.575 mm
Dot Pitch (X x Y)	0.500 mm x 0.725 mm
Weight	About 40 g

Interface

Parallel(CMOS), Asynchronous Serial (RS232)

Pin Assignment (Parallel)

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

(Asynchronous Serial)

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

Selectable Font

Parameter	*ANK(Alphabet, Numeric, Kana)
Character font type	5 x 7 ANK, International
Character width	Fixed/Proportional character format 1&2
Character numbers	20 x 2 by 5 x 7 dot ASCII 23 x 2 by 5 x 7 dot Proportional

Functions

Parameter	
Control command	
Scroll display action	
Proportional Font function	
User-Windows function	
AND/OR/XOR Mixture display	
Reverse display	
Dot unit real-time bit image display	
Download character function	
Font Magnification function	
etc.	

