

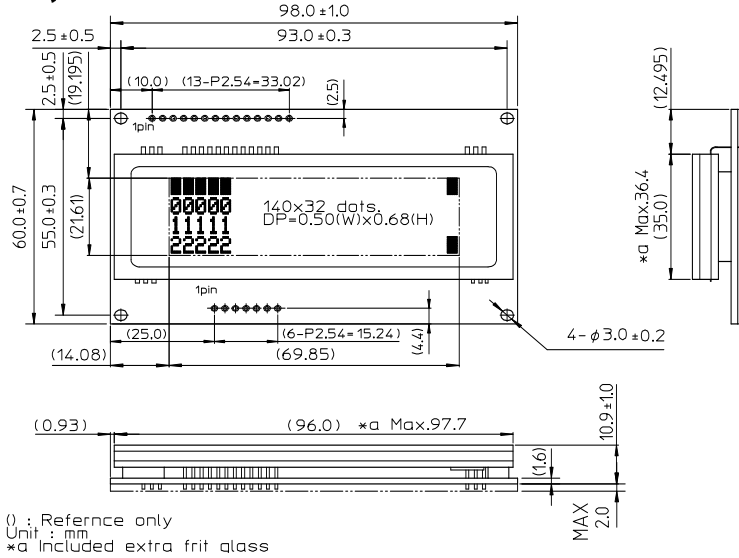
**GU140X32F-7003B**

**SIMPLIFIED DATASHEET**

**■ Features**

4 line simultaneous display capable wide screen VFD module. Same size and shape as LCD, for easy drop-in replacement. 3.3V power model and reduced-size PCB slim-type models are also available.

**■ Physical dimension**



**Get full specification**



Click here to go to request form.

**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 SIN, SCK, /CS, /RESET	IIL	-	-	-0.6	mA	VIN=0V
'H' Logic Input Current SIN, SCK, /CS, /RESET	IIH	-	-	1.0	μADC	VIN=5V
Logic Input Voltage SIN, SCK, /CS, /RESET	VIH	0.8VCC	-	VCC	VDC	-
	VIL	0	-	0.2VCC	VDC	-
Logic Output Voltage SBUSY	VOH	3.8	-	VCC	VDC	IOH=-1.5mA
	VOL	0	-	0.6	VDC	IOL=1.6mA
Power Supply Current 1	ICC-1	-	400	520	mADC	All dots ON
Power Supply Current 2	ICC-2	-	330	430	mADC	All dots OFF
Power Supply Current 3	ICC-3	-	35	45	mADC	Display power OFF
Power Consumption	-	-	2.0	2.6	W	All dots ON

**■ Optical Specifications**

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

**■ Environmental Specifications**

Parameter	Value
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 <sup>2</sup> (40G) 9ms X-Y-Z, 3 times each direction

**■ Physical Specifications**

Parameter	Value
Number of Dots	4,480 (140 x 32)
Display Area	69.85mm x 21.61 mm
Dot Size (X x Y)	0.35 mm x 0.53 mm
Dot Pitch (X x Y)	0.50 mm x 0.68 mm
Weight	About 60 g

**■ Interface**

Sync/Asynchronous Serial, SPI(CMOS)

**■ Pin Assignment**

(Synchronous)		(SPI)
Pin No.	Signal	Pin No. Signal
1	VCC	1 VCC
2	SIN	2 SIN
3	GND	3 GND
4	SBUSY	4 SBUSY
5	SCK	5 SCK
6	/RESET	6 /RESET
7	NC	7 /CS

**(Asynchronous)**

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	Value
Character font type	5 x 7 ANK, International
Character width	Fixed/Proportional character format 1&2
Character numbers	20 x 4 by 5 x 7 dot ASCII 23 x 4 by 5 x 7 dot Proportional

**■ Functions**

Parameter	Value
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.	

