

Distributed by:



[www.texim-europe.com](http://www.texim-europe.com)



**WINSTAR Display Co.,Ltd.**  
**華凌光電股份有限公司**



WEB: <https://www.winstar.com.tw> E-mail: [sales@winstar.com.tw](mailto:sales@winstar.com.tw)

## SPECIFICATION

**MODULE NO.: WO13232B**

### General Specification

Item	Dimension	Unit
Number of dots	132 x 32	—
Module dimension	65.4 x 28.2 x 9.7	mm
View area	58.3 x 19.0	mm
Active area	52.78 x 14.38	mm
Dot size	0.38 x 0.43	mm
Dot pitch	0.40 x 0.45	mm
Duty	1/33duty , 1/6 Bias	
Backlight Type	LED	
IC	ST7567A	
Interface	I2C	

## Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	$T_{OP}$	-20	—	+70	°C
Storage Temperature	$T_{ST}$	-30	—	+80	°C
Input Voltage	$V_I$	-0.3	—	$V_{DD}+0.3$	V
Digital Power Supply Voltage	$V_{DD}-V_{SS}$	-0.3	—	4	V
LCD Power supply voltage	$V_0-XV_0$	-0.3	—	18	V

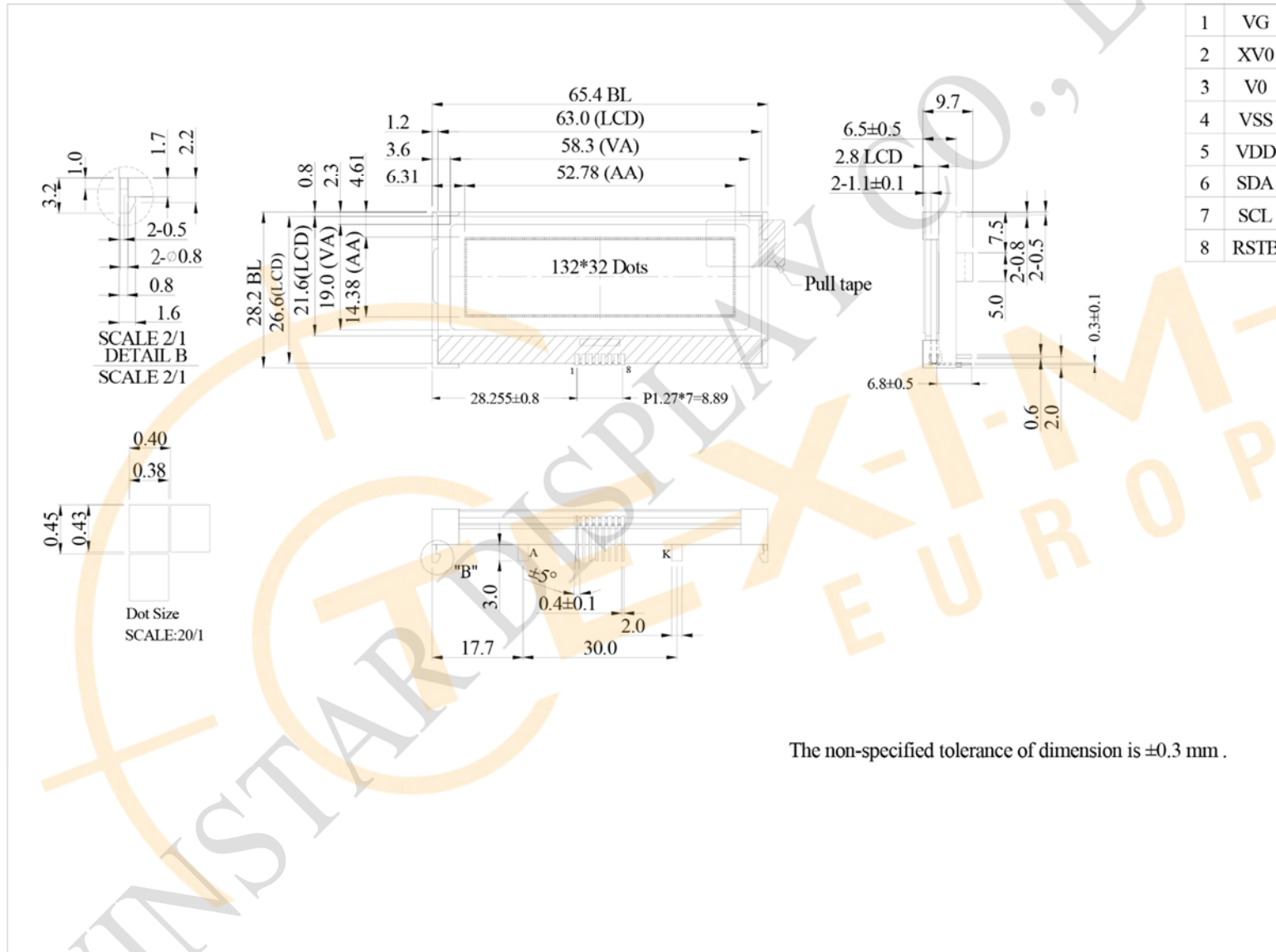
## Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	$V_{DD}-V_{SS}$	—	2.7	3.0	3.3	V
Supply Voltage For LCD	$V_{op}$	$T_a=-20^{\circ}C$	—	—	—	V
		$T_a=25^{\circ}C$	7.8	8.0	8.2	V
		$T_a=70^{\circ}C$	—	—	—	V
Input High Volt.	$V_{IH}$	—	$0.7 V_{DD}$	—	$V_{DD}$	V
Input Low Volt.	$V_{IL}$	—	$V_{SS}$	—	$0.3 V_{DD}$	V
Output High Volt.	$V_{OH}$	—	$0.8 V_{DD}$	—	$V_{DD}$	V
Output Low Volt.	$V_{OL}$	—	$V_{SS}$	—	$0.2V_{DD}$	V
Supply Current	$I_{DD}$	—	—	—	1.5	mA

# Interface Pin Function

1	VG	VG is the LCD driving voltage for segment circuits.
2	XV0	XV0 is the LCD driving voltage for common circuits at positive frame.
3	V0	V0 is the LCD driving voltage for common circuits at negative frame.
4	VSS	Ground
5	VDD	Power supply
6	SDA	Serial Data signal
7	SCL	Serial clock input
8	RSTB	External reset pin

# Contour Drawing





## Headquarters & Warehouse

Elektrostraat 17  
NL-7483 PG Haaksbergen  
The Netherlands

T: +31 (0)53 573 33 33  
E: info@texim-europe.com  
Homepage: www.texim-europe.com



### The Netherlands

Elektrostraat 17  
NL-7483 PG Haaksbergen

T: +31 (0)53 573 33 33  
E: nl@texim-europe.com



### Belgium

Zuiderlaan 14, box 10  
B-1731 Zellik

T: +32 (0)2 462 01 00  
E: belgium@texim-europe.com



### UK & Ireland

St Mary's House, Church Lane  
Carlton Le Moorland  
Lincoln LN5 9HS

T: +44 (0)1522 789 555  
E: uk@texim-europe.com



### Germany - North

Bahnhofstrasse 92  
D-25451 Quickborn

T: +49 (0)4106 627 07-0  
E: germany@texim-europe.com



### Germany - South

Martin-Kollar-Strasse 9  
D-81829 München

T: +49 (0)89 436 086-0  
E: muenchen@texim-europe.com



### Austria

Warwitzstrasse 9  
A-5020 Salzburg

T: +43 (0)662 216 026  
E: austria@texim-europe.com



### Nordic

Søndre Jagtvej 12  
DK-2970 Hørsholm

T: +45 88 20 26 30  
E: nordic@texim-europe.com



### Italy

Via Matteotti 43  
IT-20864 Agrate Brianza (MB)

T: +39 (0)39 9713293  
E: italy@texim-europe.com