LCD / LCM SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司

Represented by:

first FC components

FIRST Components s.r.l.
www.first-components.com
sales@first-components.com
+39 0332 1888005

SPECIFICATION

MODULE NO.: WO13232A

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	℃
Storage Temperature	T_{ST}	-30	–	+80	℃
Input Voltage	V_I	-0.3	–	V_{DD}+0.3	V
Digital Power Supply Voltage	V_{DD}-Vss	-0.3	–	4	V
LCD Power supply voltage	V0-XV0	-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	Vop	Ta=-20℃	–	–	–	V
		Ta=25℃	7.8	8.0	8.2	V
		Ta=70℃	–	–	–	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

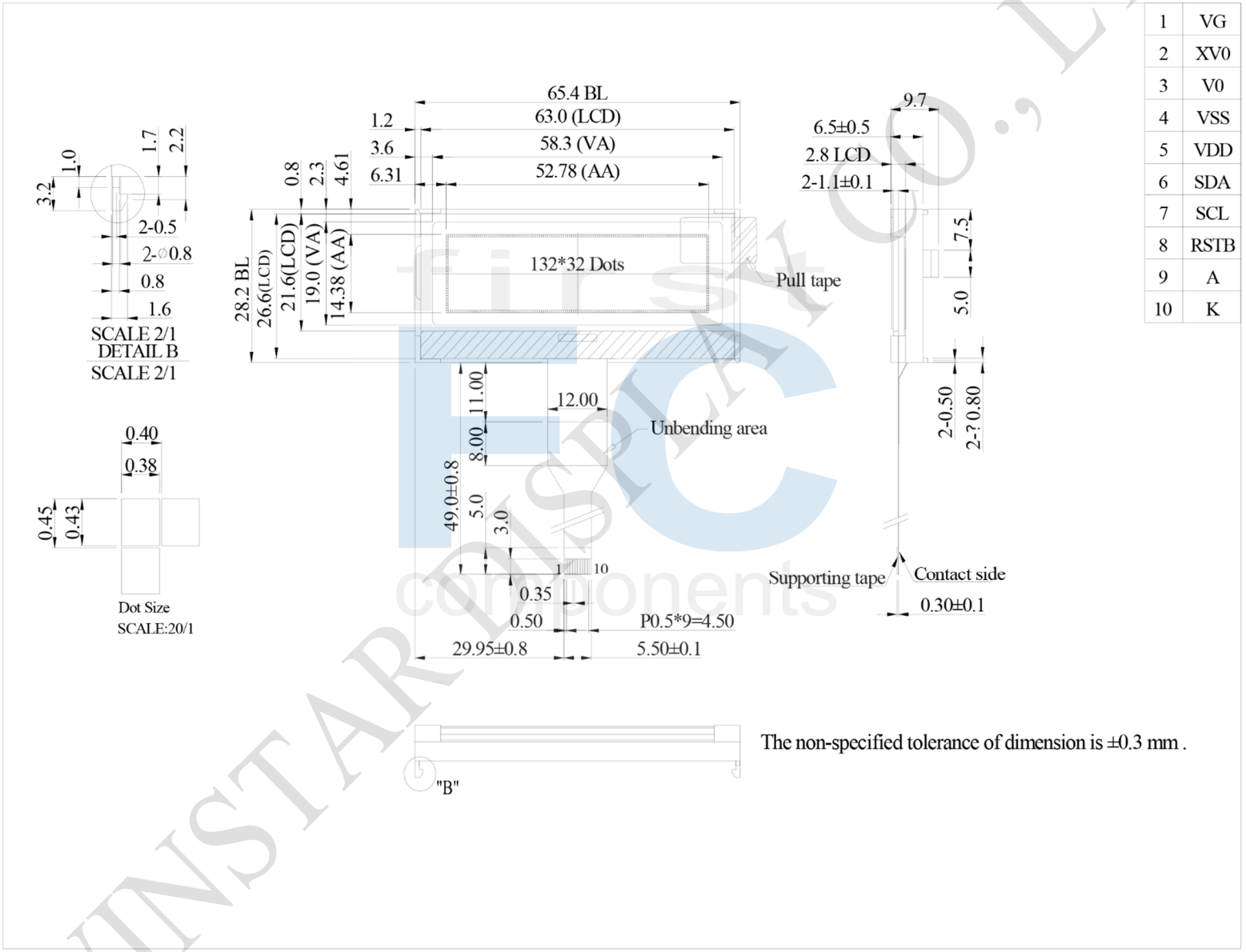
WINSTAR DISPLAY CO.,LTD
first components

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
9	A	A
10	K	K

WINSTAR DISPLAY CO.,LTD
first components

Contour Drawing



1	VG
2	XV0
3	V0
4	VSS
5	VDD
6	SDA
7	SCL
8	RSTB
9	A
10	K

The non-specified tolerance of dimension is ±0.3 mm .

WINSTAR DISPLAY CO., LTD
first components