



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.:

WG320240A

General Specification

Item	Dimension	Unit
Number of dots	320 x 240	—
Module dimension	160.0 x 109.0 x 13.0 (MAX)	mm
View area	122.0 x 92.0	mm
Active area	115.18 x 86.38	mm
Dot size	0.34 x 0.34	mm
Dot pitch	0.36 x 0.36	mm
Duty	1/240	
Backlight Type	LED	

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_{IN}	-0.3	—	$V_{DD}+0.3$	V
Supply Voltage For Logic	$V_{DD}-V_{SS}$	-0.3	—	7.0	V
Supply Voltage For LCD	$V_{DD}-V_0$	0	—	30	V

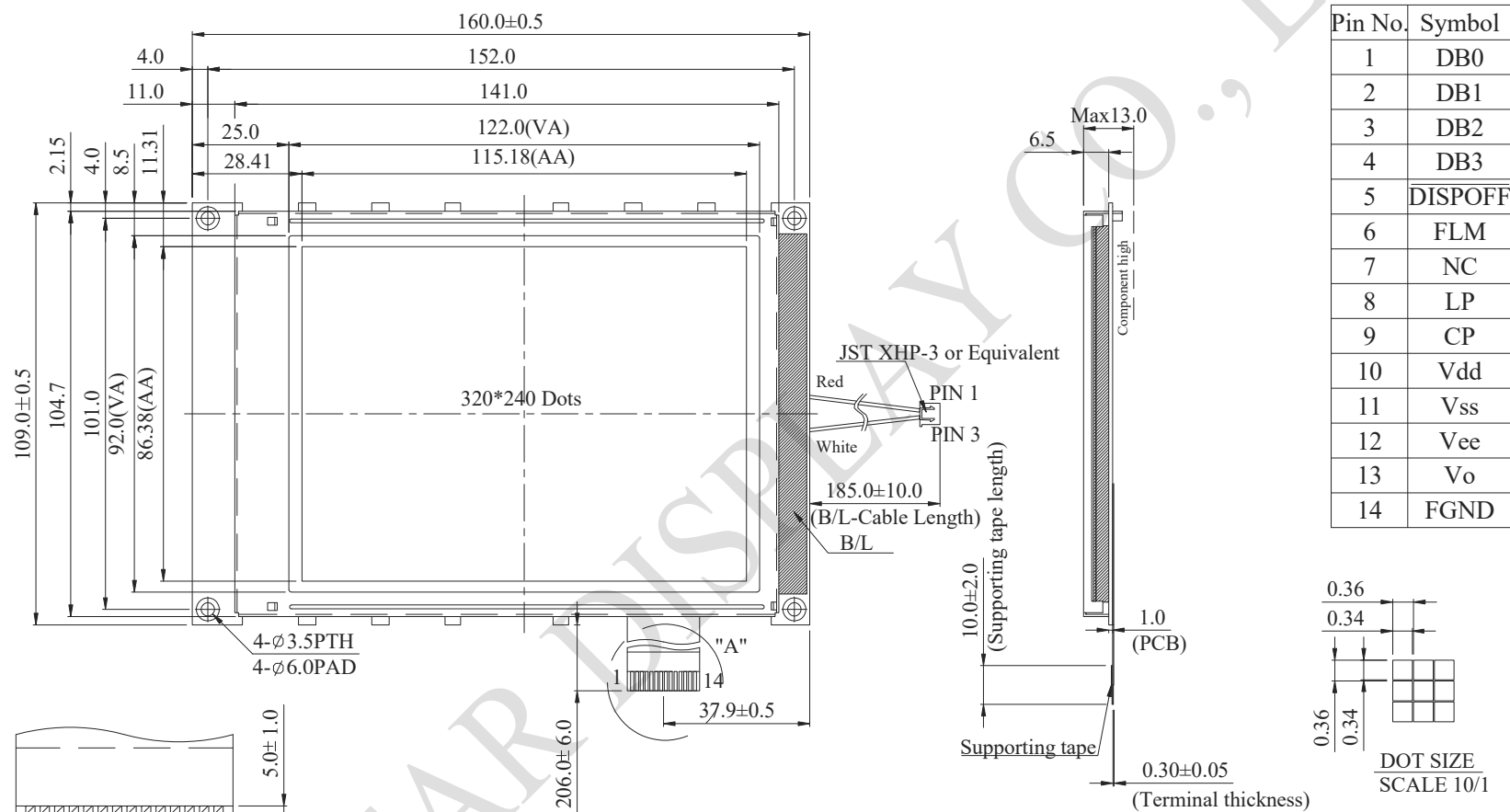
Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	$V_{DD}-V_{SS}$	—	2.7	—	5.5	V
Supply Voltage For LCD	$V_{DD}-V_0$	$T_a=-20^{\circ}\text{C}$	—	—	26.2	V
		$T_a=25^{\circ}\text{C}$	23.0	23.6	24.2	V
		$T_a=+70^{\circ}\text{C}$	22.1	—	—	V
Input High Volt.	V_{IH}	—	$0.8V_{DD}$	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	0	—	$0.2V_{DD}$	V
Output High Volt.	V_{OH}	—	$V_{DD}-0.4$	—	—	V
Output Low Volt.	V_{OL}	—	—	—	0.4	V
Supply Current	I_{DD}	—	60.0	75.0	80.0	mA

Interface Pin Function

Pin No.	Symbol	Level	Description
1	DB0	H/L	Data bus line
2	DB1	H/L	Data bus line
3	DB2	H/L	Data bus line
4	DB3	H/L	Data bus line
5	DISPOFF	H/L	H: Display ON, L: Display OFF
6	FLM	H/L	Scan start-up signal
7	NC	—	No Connection
8	LP	H to L	Data latch pulse
9	CP	H to L	Data shift pulse
10	V _{DD}	—	Power supply for Logic
11	V _{SS}	0V	Ground
12	V _{EE}	—	Negative voltage output
13	V _O	(Variable)	Driving voltage for LCD
14	FGND	—	Frame Ground

Contour Drawing



Contact Side
SCALE 2/1

The stiffen tape of the FFC cable is in the same direction
as LCD panel side and its contact side as PCB component's side

Pin No.	Symbol
1	A
3	K