



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司

SPECIFICATION

MODULE NO.: WG16080D

General Specification

Item	Dimension	Unit
Number of dots	160 x 80	—
Module dimension	93.0 x 70.0 x 13.6 (MAX)	mm
View area	72.0 x 40.0	mm
Active area	67.17 x 33.57	mm
Dot size	0.39 x 0.39	mm
Dot pitch	0.42 x 0.42	mm
Duty	1/80DUTY ,1/9BIAS	
Backlight Type	LED	
IC	RA6963	
Interface	8080	

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

Electrical Characteristics

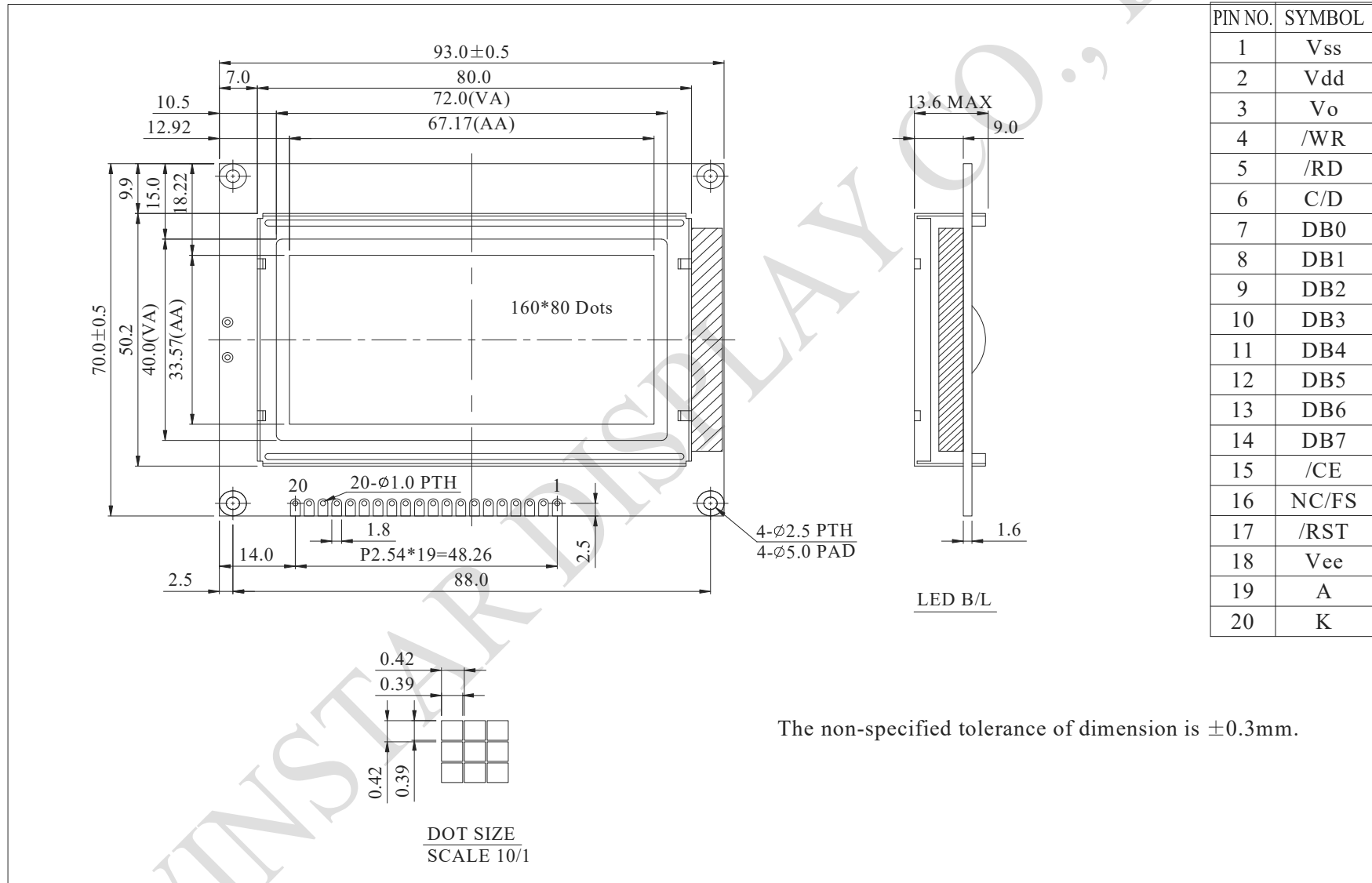
Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	$V_{DD}-V_{SS}$	—	4.5	5.0	5.5	V
Supply Voltage For LCD	$V_{DD}-V_O$	$T_a=-20^{\circ}\text{C}$	—	—	—	V
		$T_a=25^{\circ}\text{C}$	13.2	13.5	13.8	V
		$T_a=70^{\circ}\text{C}$	—	—	—	V
Input High Volt.	V_{IH}	—	$0.8V_{DD}$	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	0	—	$0.15 V_{DD}$	V
Output High Volt.	V_{OH}	—	$V_{DD}-0.3$	—	V_{DD}	V
Output Low Volt.	V_{OL}	—	0	—	0.3	V
Supply Current	I_{DD}	$V_{DD}=5.0\text{V}$	—	18.2	—	mA

Interface Pin Function

Pin No.	Symbol	Level	Description
1	V _{ss}		Ground
2	V _{dd}	5.0V	Power supply for logic circuit
3	V _o		Contrast Adjustment
4	/WR	H / L	Data write. Write data into RA6963C when /WR = L
5	/RD	H / L	Data read. Read data from RA6963C when RD = L
6	C/D	H / L	Command/data read/write
7	DB0	H / L	Data bus line
8	DB1	H / L	Data bus line
9	DB2	H / L	Data bus line
10	DB3	H / L	Data bus line
11	DB4	H / L	Data bus line
12	DB5	H / L	Data bus line
13	DB6	H / L	Data bus line
14	DB7	H / L	Data bus line
15	/CE	L	Chip enable the controller RA6963C
16	NC/FS		No connection / Pins for selection of font ;
17	/RST	L	Reset active “ L “
18	V _{ee}		Negative voltage output
19	A		Power supply for B/L +
20	K		Power supply for B/L -

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Contour Drawing



PIN NO.	SYMBOL
1	V _{ss}
2	V _{dd}
3	V _o
4	/WR
5	/RD
6	C/D
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	/CE
16	NC/FS
17	/RST
18	V _{ee}
19	A
20	K

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