



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.:

WG160160A

General Specification

Item	Dimension	Unit
Number of dots	160 x 160	—
Module dimension	89.2 x 85.0 x 14.5 (MAX)	mm
View area	62.0 x 62.0	mm
Active area	60.78 x 60.78	mm
Dot size	0.36 x 0.36	mm
Dot pitch	0.38 x 0.38	mm
Duty	1/160	
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	—	28	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	$V_{DD}-V_0$	$T_a=-20^{\circ}\text{C}$	—	—	—	V
		$T_a=25^{\circ}\text{C}$	18.5	18.75	19.0	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	—	$0.2V_{DD}$	V
Output High Volt.	V_{OH}	—	$V_{DD}-0.4$	—	—	V
Output Low Volt.	V_{OL}	—	—	—	0.4	V
Supply Current	I_{DD}	—	4.0	5.5	8.0	mA

Interface Pin Function

Pin No.	Symbol	Level	Description
1	V _{SS}	0V	Ground
2	M	H/L	Control Signal For AC Driving
3	FLM	H	Operating voltage for LCD
4	CL1	H/L	Display data latch
5	CL2	H/L	Display data Shift
6	DB3	H/L	Data bus line
7	DB2	H/L	Data bus line
8	DB1	H/L	Data bus line
9	DB0	H/L	Data bus line
10	VEE	H/L	Power supply for LC driving
11	VDD	-	Power supply for logic circuit
12	VO	-	Contrast Adjustment
13	DISP OFF	L	Display off when low level
14	A	-	Power supply for backlight (+)
15	K	-	Power supply for backlight (-)

Contour Drawing

