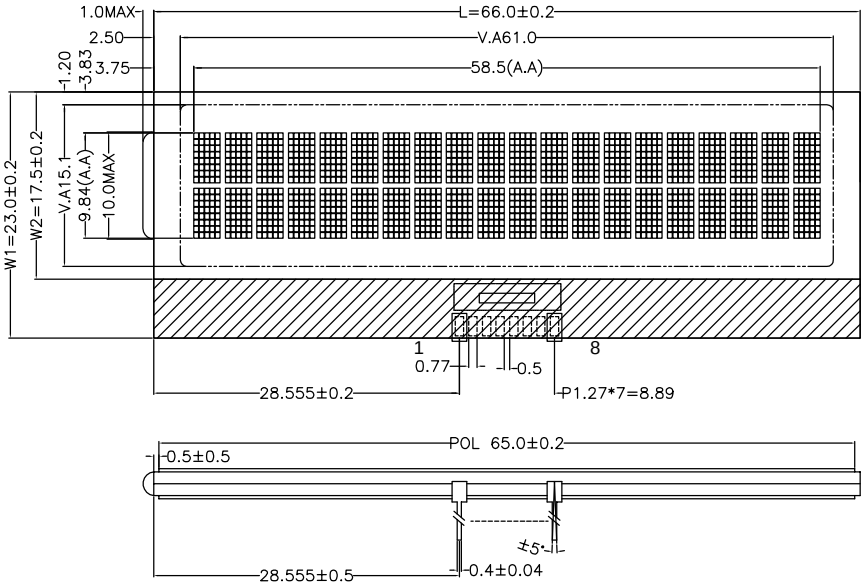
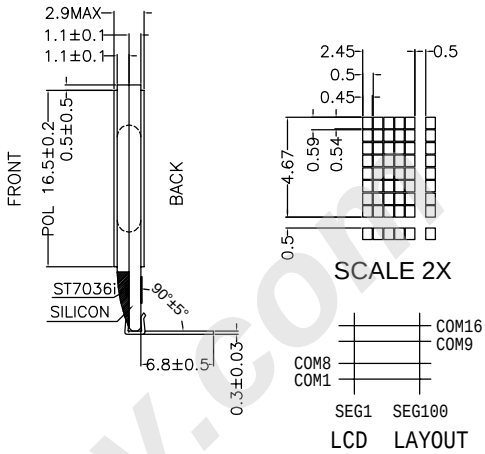
E-SHINE DISPLAY CO., LTD. EX2002A5

Dimension Drawing





TOLERANCES UNLESS OTHERWISE STATED
X.X ±0.20 X.XX ±0.10 UNIT: mm

Feature:

1. 2-line x20 characters display; 5x8 dots with cursor
2. Built-in controller ST7036
3. +5V power supply(also available for +3.3V)
4. 1/16 Duty cycle
5. STN or FSTN Mode
6. ROHS compliant

Interface Pin Connections

PIN NO.	Symbol	Function
1	VOUT	DC/DC voltage converter.
2	CAP1N	For voltage booster circuit(VDD-VSS) External capacitor about 0.1u~4.7uf
3	CAP1P	
4	VDD	Power supply +5V Or +3.3V
5	VSS	Power supply GND
6	SDA	Input data
7	SCL	Serial clock
8	REST	External reset pin.

Mechanical Data

Item	Standard	Unit
Module dimension	66.0 x 23.0	mm
Viewing area	61.0 x 15.1	mm
Character size	2.45 x 4.67	mm
Dots size	0.45 x 0.54	mm

Absolute Maximum Rating

Item	Symbol	Standard			Unit
		Min	Typ	Max	
Power supply	VDD-VSS	-0.3	---	7.0	V
Input voltage	VI	-0.3	---	VDD+0.3	

Electronical Characteristics

Item	Symbol	Condition		Standard			Unit
				Min	Typ	Max	
Input voltage	VDD	+5.0V		4.5	5.0	5.5	V
		+3.3V		2.7	3.3	4.5	
Supply current	I_{DD}	VDD=5V		----	160	230	uA
Recommended LCD driving voltage for normal temp version module	VDD-V0 (VDD=5V)	-20°C		4.9	5.2	5.5	V
		0°C		4.5	4.8	5.1	
		25°C		4.1	4.5	4.8	
		50°C		3.8	5.0	4.4	
		70°C		3.5	4.2	5.5	
LED forward voltage	VF	25°C		----	----	----	V
LED forward current	IF	25°C	Edge	----	----	----	mA

Display Character Address Code:

Display position	1	2	3	4	5	6	7	8	9	--	--	--	--	--	--	19	20
DDRAM address	00	01	02	--	--	--	--	--	--	--	--	--	--	--	--	--	13H
DDRAM address	40	41	42	--	--	--	--	--	--	--	--	--	--	--	--	--	53H

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