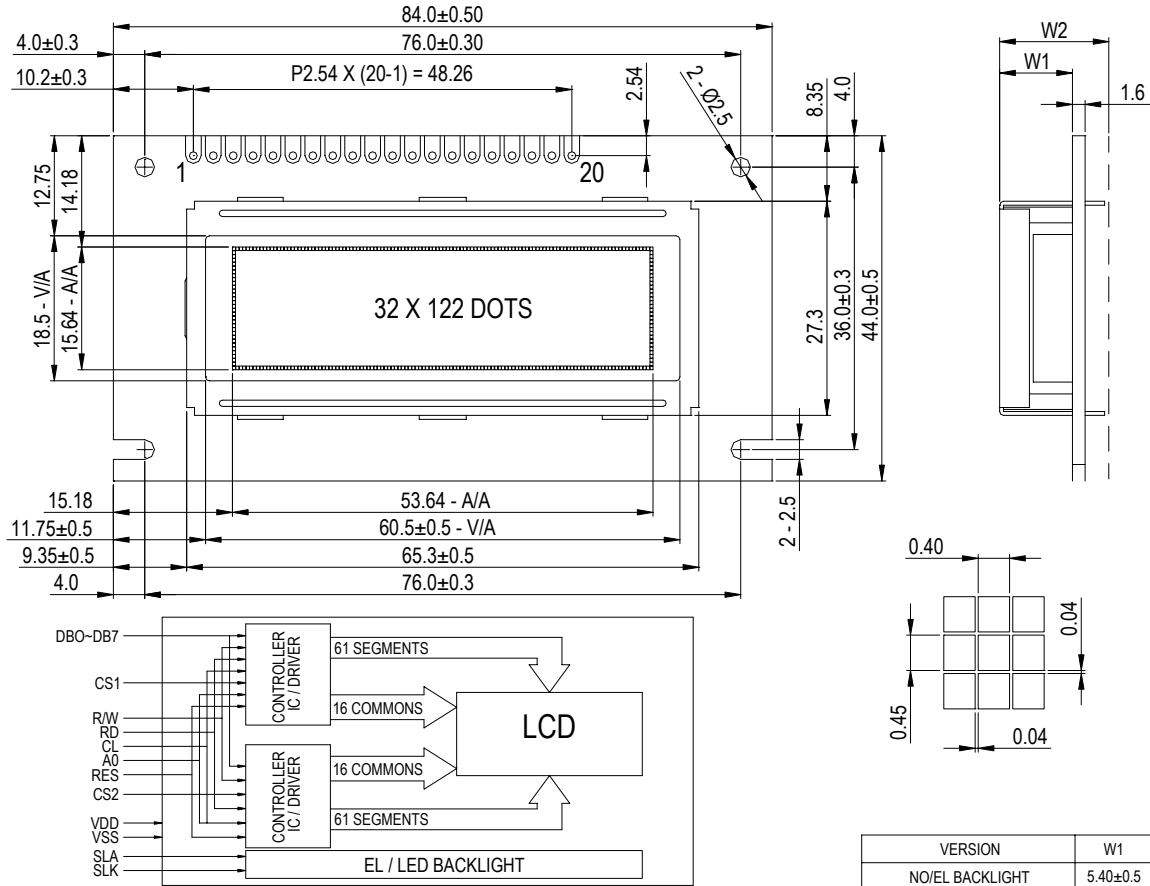




STANDARD GRAPHICS MODULES

G32122x02..... OUTLINE DIMENSION AND BLOCK DIAGRAM



The tolerance unless classified ±0.3 mm

PIN ASSIGNMENT		
Pin No.	Symbol	Function
1	VSS	Ground Terminal
2	VDD	Supply Terminal
3	NC	No Connection
4	A0	Select Display Data / Instruction
5	E1	Enable IC U1
6	E2	Enable IC U2
7	VEE*	Negative voltage for VLCD
8	NC	No Connection
9	R/W	Write / Read Selection
10	DB0	Data Bus Line
11	DB1	Data Bus Line
12	DB2	Data Bus Line
13	DB3	Data Bus Line
14	DB4	Data Bus Line
15	DB5	Data Bus Line
16	DB6	Data Bus Line
17	DB7	Data Bus Line
18	RES	Reset
19	SLA	Led Backlight Power Supply
20	SLK	Led Backlight Ground

NOTE :
 1. BACKLIGHT - YELLOW GREEN : BOTTOM LED BACKLIGHT
 2. BACKLIGHT - OTHER COLOR : SIDE LED BACKLIGHT
 3. If J1 is used : V_{DD} = 5V , V_{SS} = 0V (GND), V_{EE} = NC
 If J2 is used : V_{DD} = 2.4V~5V , V_{EE} = -2.6V~0V

ABSOLUTE MAXIMUM RATING						
Item	Symbol	Conditions	Min.	Max.	Unit	
Power Supply Voltage	V _{DD-VSS}	-	-0.3	7.0	V	
Input Voltage	V _{IN}	-	V _{SS}	V _{DD}	V	
NORMAL	OPERATING TEMPERATURE	T _{opr}	Normal	0	+50	°C
	STORAGE TEMPERATURE	T _{stg}	Normal	-20	+70	°C
WIDE	OPERATING TEMPERATURE	T _{opr}	Normal	-20	+70	°C
	STORAGE TEMPERATURE	T _{stg}	Normal	-30	+80	°C

ELECTRICAL CHARACTERISTIC (V _{DD} = + 5v, T _a = 25°C)						
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Logic Supply Voltage	V _{DD}	-	4.5	5.0	5.5	V
"H" Input Voltage	V _{ih}	-	-	-	-	V
"L" Input Voltage	V _{il}	-	-	-	-	V
"H" Output Voltage	V _{oh}	-	-	-	-	V
"L" Output Voltage	V _{ol}	-	-	-	-	V
Module Supply Current	I _{DD}	-	-	0.5	1.0	mA
LCD Driving Voltage	V _{LED}	V _{DD-Vo}	4.8	5.0	5.2	V

BACKLIGHT OPTION					
LED COLOR	OPTION	CONDITION	FORWARD CURRENT (mA)		
			MIN	TYP	MAX
YELLOW GREEN	YES	V _{led} = 5.0V R _{led} = 10 ohm	-	65	85
WHITE	YES	V _{led} = 5.0V R _{led} = 47 ohm	-	30	-
BLUE	YES	V _{led} = 5.0V R _{led} = 47 ohm	-	35	-
AMBER	NO	-	-	-	-
RED	YES	V _{led} = 5.0V R _{led} = 47 ohm	-	80	-
CCFL	NO	-	-	-	-
EL	NO	-	-	-	-

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