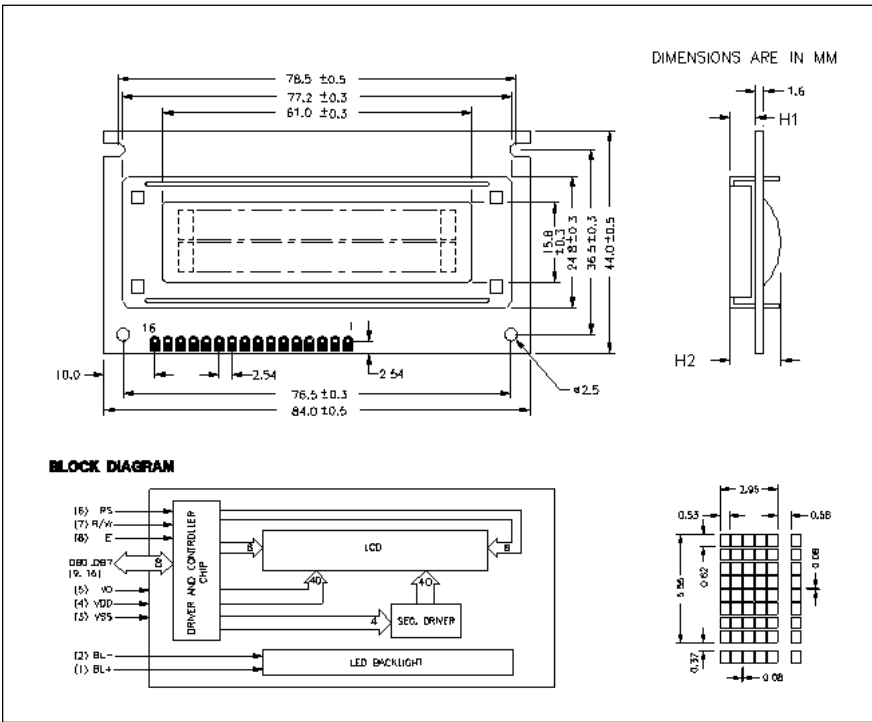


GENERAL DESCRIPTION

- Display mode : 16 characters x 2 lines LCD module
- Interface : 4-bit or 8-bit parallel
- Driving method : 1/16 duty, 1/5 bias
- Controller IC : Samsung KS0066 or Equivalent
For the detailed information, please refer to IC specifications.



MECHANICAL DIMENSIONS

Item	Dimension		Unit	Item	Dimension		Unit
Outline Dimension	84.0(L)x44.0(W)x (H1/H2)		mm	Character Pitch	3.53(L)x5.92(W)		mm
Viewing Area	61.0(L)x15.8(W)		mm	Dot Size	0.53(L)x0.62(W)		mm
Character Size	2.95(L)x5.55(W)		mm				
No Backlight (N)	H1	5.0	mm	Side Backlight (L)	H1	8.0	mm
	H2	9.1	mm		H2	12.1	mm
EL Backlight (E)	H1	5.0	mm	Array Backlight (M)	H1	8.0	mm
	H2	9.1	mm		H2	12.1	mm

CONNECTOR PIN ASSIGNMENT

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	BL+	Backlight Power Supply (+)	9	DB0	Data Bus Line
2	BL-	Backlight Power Supply (-)	10	DB1	Data Bus Line
3	VSS	0V Power Supply	11	DB2	Data Bus Line
4	VDD	5V Power Supply	12	DB3	Data Bus Line
5	Vo	LCD Drive, OV to VDD	13	DB4	Data Bus Line
6	RS	Register Select Input	14	DB5	Data Bus Line
7	R/W	Read/Write	15	DB6	Data Bus Line
8	E	Enable Signal	16	DB7	Data Bus Line

ELECTRICAL CHARACTERISTICS

Conditions: VSS=0V, @Ta=25°C

Item	Symbol	MIN.	TYP.	MAX.	Unit	Item	Symbol	MIN.	TYP.	MAX.	Unit
Supply Voltage	VDD	4.75	5.00	5.25	V	"H"Level Input Voltage	V _{IH}	2.20	-	VDD	V
Supply Current	I _{DD}	-	1.20	1.40	mA	"L"Level Input Voltage	V _{IL}	0	-	0.60	V
Backlight Voltage						Backlight Current					
EL (@ Frequency 400Hz)	VEL	-	100	150	V _{rms}						
Side-lit LED						Side-lit LED					
White	V _{BL}	3.00	3.20	3.40	V	White	I _{BL}	-	40	50	mA
Blue	V _{BL}	-	-	-	V	Blue	I _{BL}	-	-	-	mA
Yellow Green	V _{BL}	-	-	-	V	Yellow Green	I _{BL}	-	-	-	mA
Array LED						Array LED					
Yellow Green	V _{BL}	3.85	4.05	4.25	V	Yellow Green	I _{BL}	-	110	200	mA
Amber	V _{BL}	-	-	-	V	Amber	I _{BL}	-	-	-	mA
Orange	V _{BL}	-	-	-	V	Orange	I _{BL}	-	-	-	mA
Soft Orange	V _{BL}	-	-	-	V	Soft Orange	I _{BL}	-	-	-	mA

ABSOLUTE MAXIMUM RATINGS

Please make sure not to exceed the following maximum rating values under the worst application conditions

Item	Symbol	Rating (for normal temperature)	Rating (for wide temperature)	Unit
Supply Voltage	VDD	7	7	V
Input Voltage	V _I	-0.3 to VDD +0.3	-0.3 to VDD +0.3	V
Operating Temperature	T _{opr}	0 to 50	-20 to 70	°C
Storage Temperature	T _{stg}	-10 to 60	-30 to 80	°C