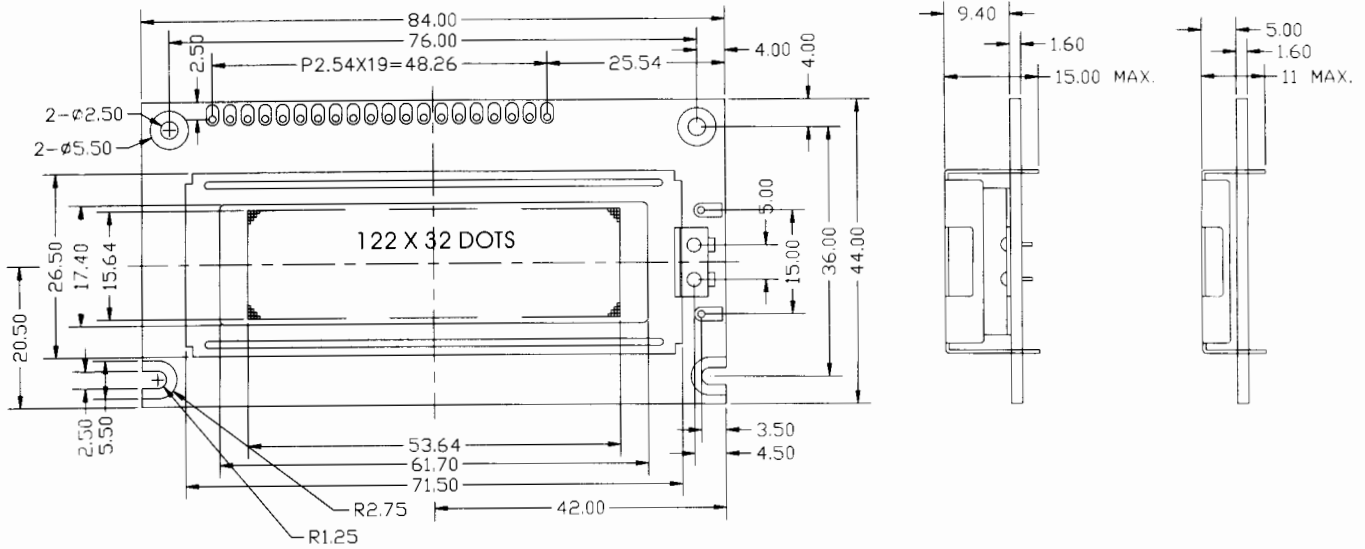
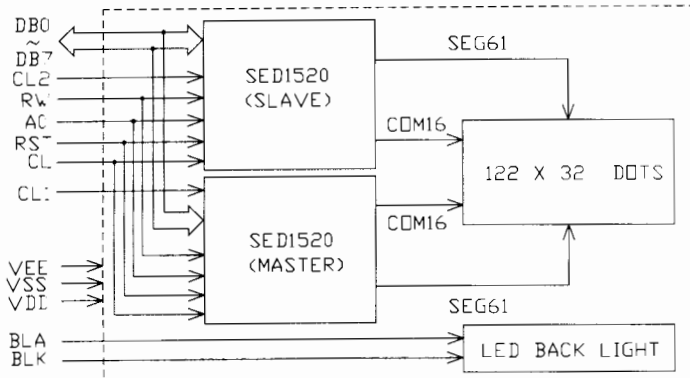


OUTLINE DIMENSION

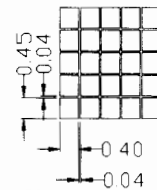


Graphic Type

BLOCK DIAGRAM



DISPLAY PATTERN



MECHANICAL SPECIFICATION

Item	Dimensions (W) X (H)	Unit
Overall Size	84.0 X 44.0	MM
View Area	62.2 X 17.9	MM
Dot Size	0.40 X 0.45	MM
Dot Pitch	0.44 X 0.49	MM

PIN ASSIGNMENT

Pin no.	Symbol	Function
1	Vss	Ground
2	Vdd	Supply voltage for logic
3	VEE	Input voltage for LCD
4	A0	H: Data signal, L: Instruction signal
5	/CS1	Read/write enable signal(master)
6	/CS2	Read/write enable signal(slave)
7	CL	Connected external clock
8	/RD(E)	Read mode (Enable)
9	/WR(RW)	Write mode (Read/Write)
10-17	DB0-7	Data bus 0~7
18	RST	Rest
19	BLA	Back light anode
20	BLK	Back light cathode

ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min.	Max.	Unit
Supply for logic voltage	V _{DD}	25°C	0	6.7	V
LCD driving supply voltage	V _{LCD}	25°C	0	10	V
Input voltage	V _I	25°C	0	V _{DD}	V

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typical	Max.	Unit
Supply voltage for logic	V _{DD}	---	4.5	5.0	5.5	V
Supply current for logic	I _{DD}	---	---	0.6	1.1	mA
Operation voltage for LCD	V _{DD} - V _{EE}	0°C	5.4	5.7	6.0	V
		25°C	5.1	5.4	5.7	V
		50°C	4.8	5.1	5.4	V
Input voltage "H" level	V _{IH}	---	0.8V _{DD}	---	V _{DD}	V
Input voltage "L" level	V _{IL}	---	0	---	0.2V _{DD}	V
Supply voltage for back light	V _F	---	---	4.2	4.6	V
Supply current for back light	I _F	V _F =4.2V	---	150	230	mA

REMARKS:

- LCD options: STN, FSTN.
- Back light Options: EL Back light feature, other Specs not available on catalog is under request.