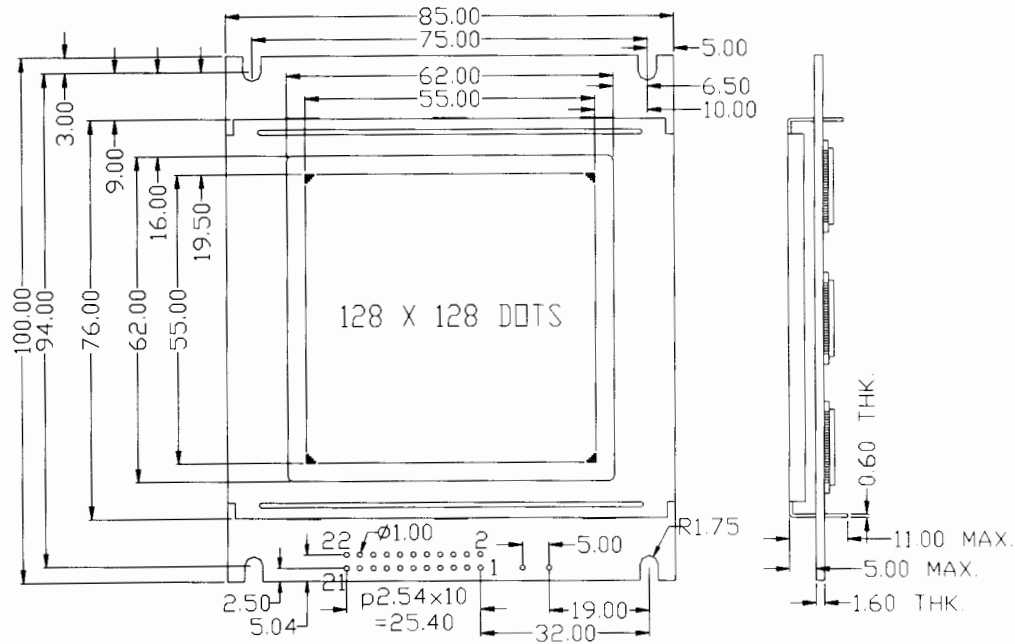
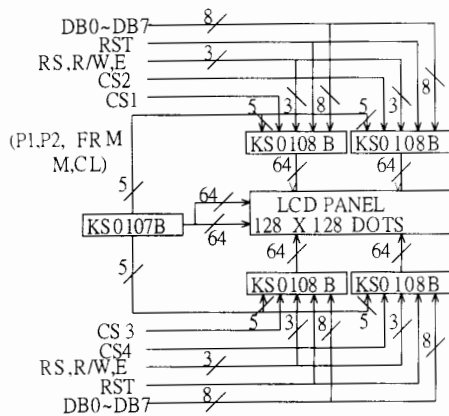


OUTLINE DIMENSION

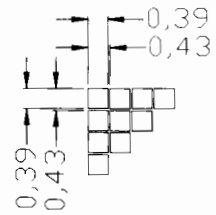


Graphic Type

BLOCK DIAGRAM



DISPLAY PATTERN



MECHANICAL SPECIFICATION

Item	Dimensions (w) X (H)	Unit
Overall Size	85 X 100	MM
View Area	62 X 62	MM
Dot Size	0.39 X 0.39	MM
Dot Pitch	0.43 X 0.43	MM

PIN ASSIGNMENT

Pin no.	Symbol	Function
1	VSS	GND
2	VDD	Power supply (+)
3	VO	Contrast Adjust
4	RS	Command data input
5	RW	Data read / write
6	E	Chip enable signal
7	RST	Reset signal
8 ~ 15	DB0 ~ DB7	Data bus line
16	CS1	Chip selection for KS0108B(1)
17	CS2	Chip selection for KS0108B(2)
18	CS3	Chip selection for KS0108B(3)
19	CS4	Chip selection for KS0108B(4)
20	VOUT	Output voltage for LCD
21	SLA	Side light anode
22	SLK	Side light cathode

ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min.	Max.	Unit
Supply for logic voltage	V _{DD}	25°C	-0.3	7.0	V
LCD driving supply voltage	V _{DD} - V _{EE}	25°C	V _{DD} +19	V _{DD} +0.3	V
Input voltage	V _I	25°C	-0.3	V _{DD} +0.3	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}	---	---	11.9	20	mA
Operation voltage for LCD	V _{DD} - V _O	0°C	12.7	13.4	14.1	V
		25°C	12.4	13.1	13.3	V
		50°C	11.9	12.6	4.6	V
Input voltage "H" level	V _{IH}	---	2.0	---	V _{DD}	V
Input voltage "L" level	V _{IL}	---	0	---	0.8	V
Supply voltage for back light	V _F	---	---	4.2	4.6	V
Supply current for back light	I _F	V _F =4.2V	---	140	240	mA

REMARKS:

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