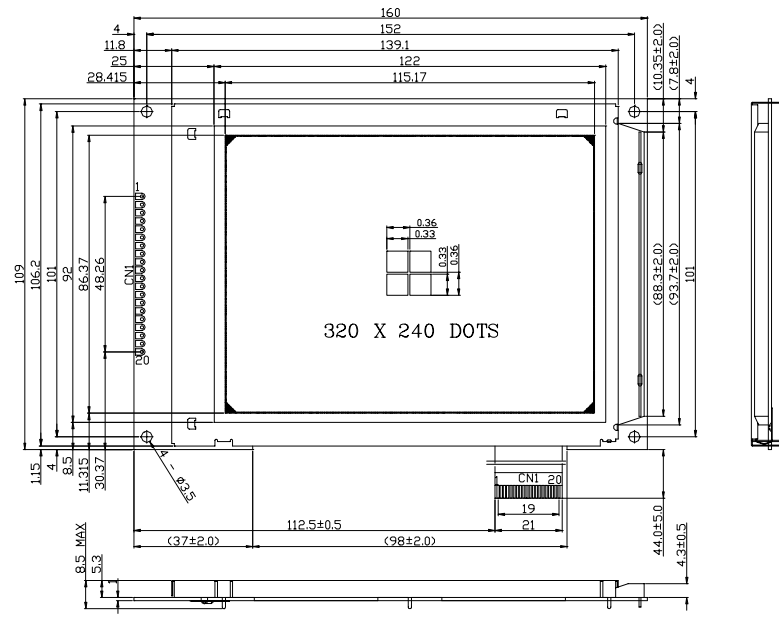
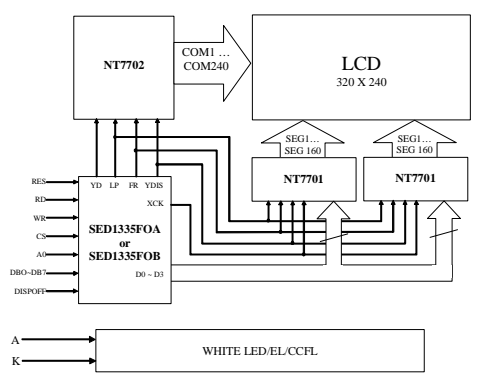


OUTLINE DIMENSION

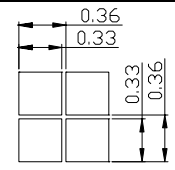


Tolerance: ± 0.20mm, unless otherwise specified.

BLOCK DIAGRAM



DISPLAY PATTERN



MECHANICAL SPECIFICATION

Item	Dimensions(W)X(H)	Unit
Overall Size	160.0x109.0	MM
View Area	122.0x92.0	MM
Dot Size	0.33x0.33	MM
Dot Pitch	0.36x0.36	MM

PIN ASSIGNMENT

Pin on	Symbol	Function
1	RES	Reset (active low)
2	RD	Read select (active low)
3	WR	Write select (active low)
4	CS	Chip select (active low)
5	A0	Data / instruction signal
6-13	DB0-DB7	Bi-directional data bus.
14	VCC	Supply terminal of module
15	VSS	Ground terminal of module
16	VEE	LCD supply voltage
17	Vadj	Contrast adjust
18	DISPOFF	Display off signal
19	A	Backlight power supply
20	K	Backlight ground

ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min	Max	Unit
Supply for logic voltage	V _{DD} - V _{SS}	25°C	0	7.0	V
LCD driving supply voltage	V _{EE} - V _{SS}	25°C	---	26.0	V
Input voltage	V _I	25°C	0.7	V _{DD}	V

ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typical	Max.	Unit
Supply voltage for logic	V _{DD} - V _{SS}	---	4.5	5.0	5.5	V
Supply current for logic	I _{DD}	V _{DD} -V _{SS} =5V	49.6	52.8	64.0	mA
Supply current for LCD	I _{EE}	V _{EE} -V _{SS} =25V	---	TBD	-	mA
Operation voltage for LCD	V _{EE}	25°C	---	23.0	---	V
Input voltage "H" level	V _{IH}	---	0.7V _{DD}	---	V _{DD}	V
Input voltage "L" level	V _{IL}	---	0	---	0.3V _{DD}	V
Supply voltage for LED	V _{LED}	---	---	TBD	---	V
Supply current for LED	I _{LED}	V _{LED} =22V	---	TBD	---	mA

REMARKS:

- LCD options: STN, FSTN.
- Back light Options: LED\EL\CCFL Back light feature.

Graphic Type