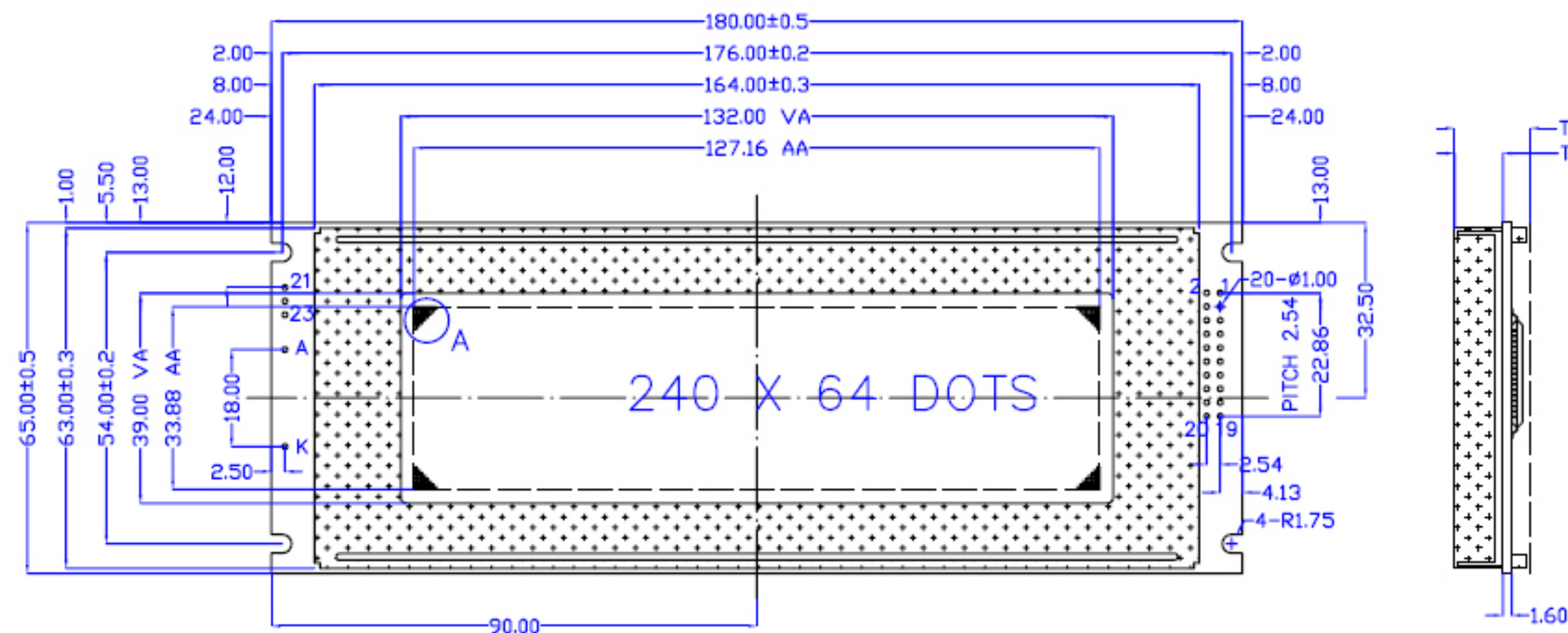
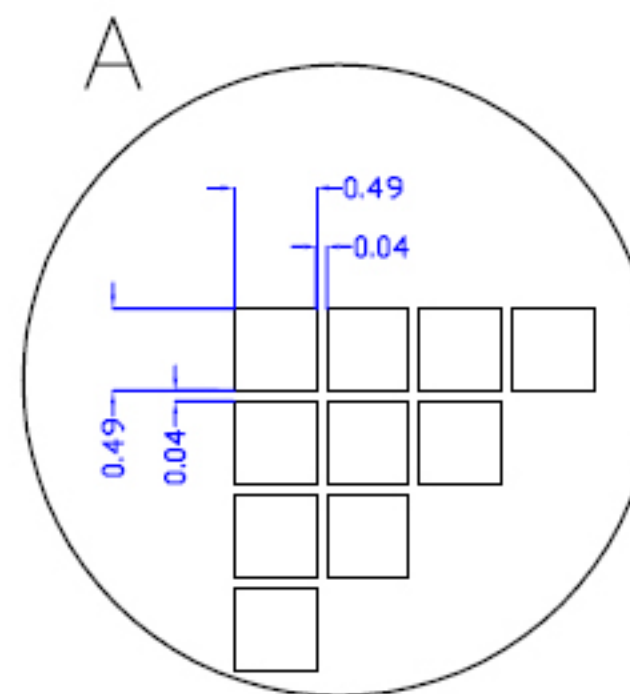
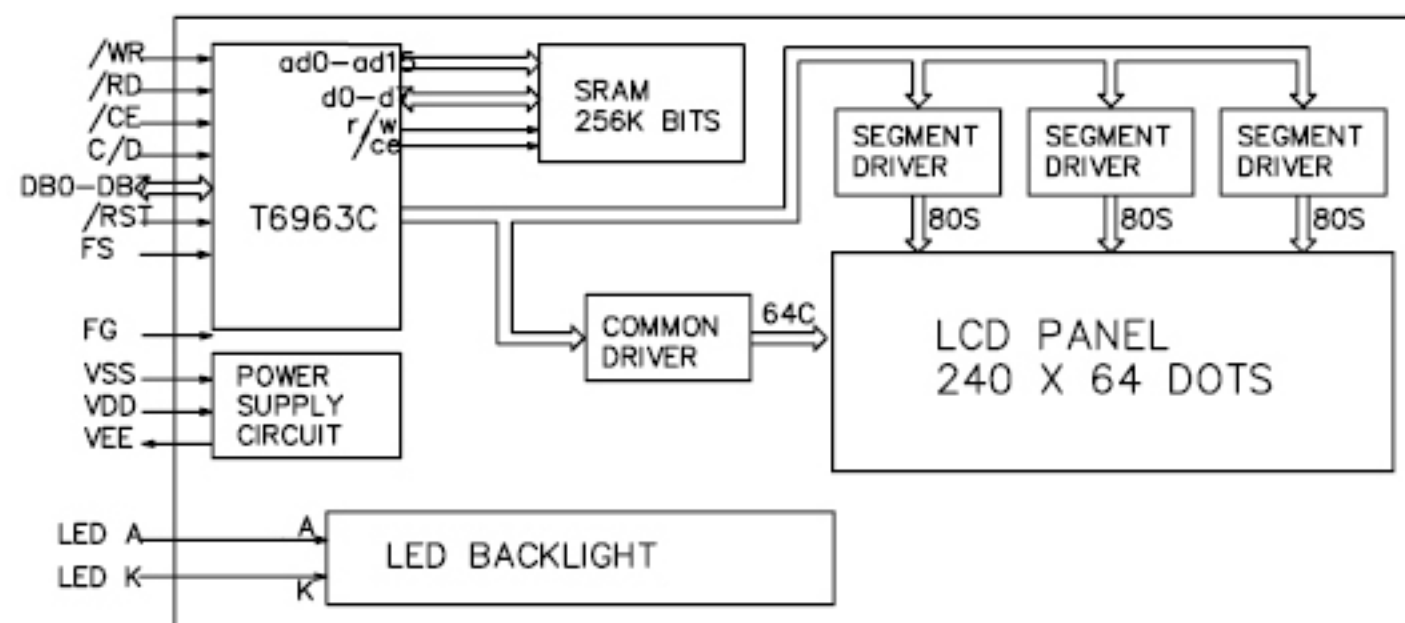




* FOR LED BACKLIGHT
TH1=14.0MAX TH2=9.0MAX
* FOR EL OR NO BACKLIGHT
TH1=11.0MAX TH2=6.0MAX



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	02/03/28	A.CH	NEW RELEASE

PINS ASSIGNMENT

NO.	SYMBOL	DESCRIPTION
1	FG	FRAME GROUND
2	VSS	GROUND
3	VDD	POWER SUPPLY FOR LOGIC AND LCD
4	V0	OPERATING VOLTAGE FOR LCD
5	/WR	DATA WRITE
6	/RD	DATA READ
7	/CE	CHIP ENABLE FOR T6963C
8	C/D	COMMAND/DATA SELECTION
9	NC	NO CONNECT
10	/RST	RESET T6963C (LOW EFFECTIVE)
11-18	DB0-DB7	DATA BUS
19	FS	FONT SELECTION (L: 8X8, H: 6X8)
20	VEE	ON CHIP DC/DC OUTPUT (-10V)
21	A	LED POWER SUPPLY(+)
22	NC	NO CONNECTION
23	K	LED POWER SUPPLY(-)

ABSOLUTE MAXIMUM RATING

ITEM	SYMBOL	MIN	MAX	UNIT
POWER SUPPLY(LOGIC)	VDD-VSS	0	6.5	V
POWER SUPPLY(LCD DRV.)	VDD-V0	0	18.0	V
INPUT VOLTAGE	VI	VI	VDD	V

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
VOLTAGE FOR LOGIC	VDD-VSS	4.75	5.0	5.25	V
SUPPLY CURRENT	IDD	-	8.7	-	mA
LCD OPERATING VOLTAGE	OC	-	12.5	-	V
	25C	-	11.5	-	V
	40C	-	10.5	-	V
INPUT VOLTAGE	H	VIH	0.7VDD	-	V
	L	VIL	0	0.3VDD	V

MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATION	UNIT
OVERALL SIZE	180.0W x 65.0H x 14.0T(11.0T)	MM
VIEWING AREA	132.0W x 39.0H	MM
DOT NUMBER	240 x 64	DOTS
DOT SIZE	0.49W x 0.49H	MM
DOT PITCH	0.53W x 0.53H	MM

OPTIONS

- LCD TYPE: Y/G STN; GRAY STN; B/W FSTN
- BACKLIGHT: WITHOUT BACKLIGHT; LED; EL
- COLOR OF BACKLIGHT: Y/G; BLUE; WHITE
- TEMPERATURE RANGE: NORMAL(0-50C); EXTENDED(-20-70C)
- POWER SUPPLY: ON BOARD DC/DC(SINGLE 5.0V); DUAL POWER SUPPLY(5.0V & -10.0V)
- VIEWING ANGLE: 6H; 12H

NT-G240641B

240 X 64 DOTS GRAPHIC LCM

NELY

ALL DIMENSIONS ARE IN MM. TOLERANCE IS +/-0.2
UNLESS OTHERWISE NOTED.