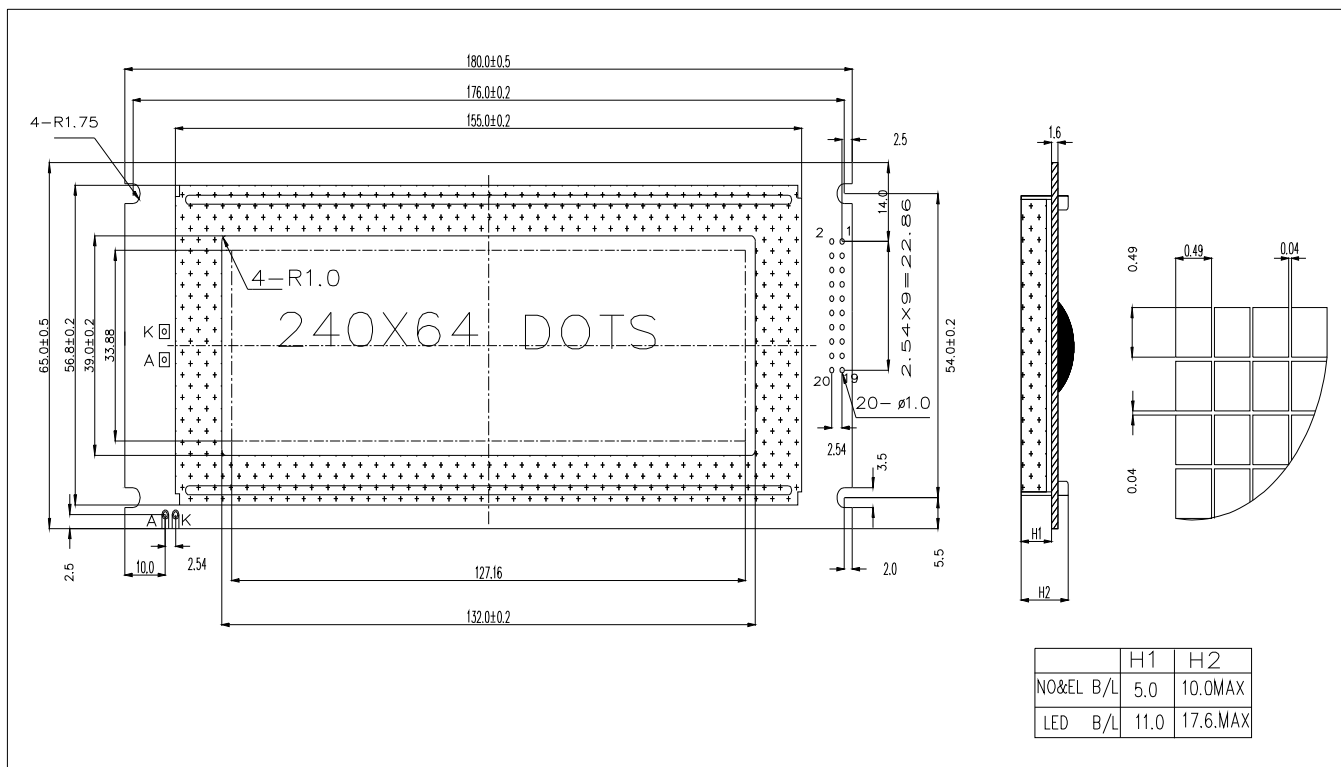
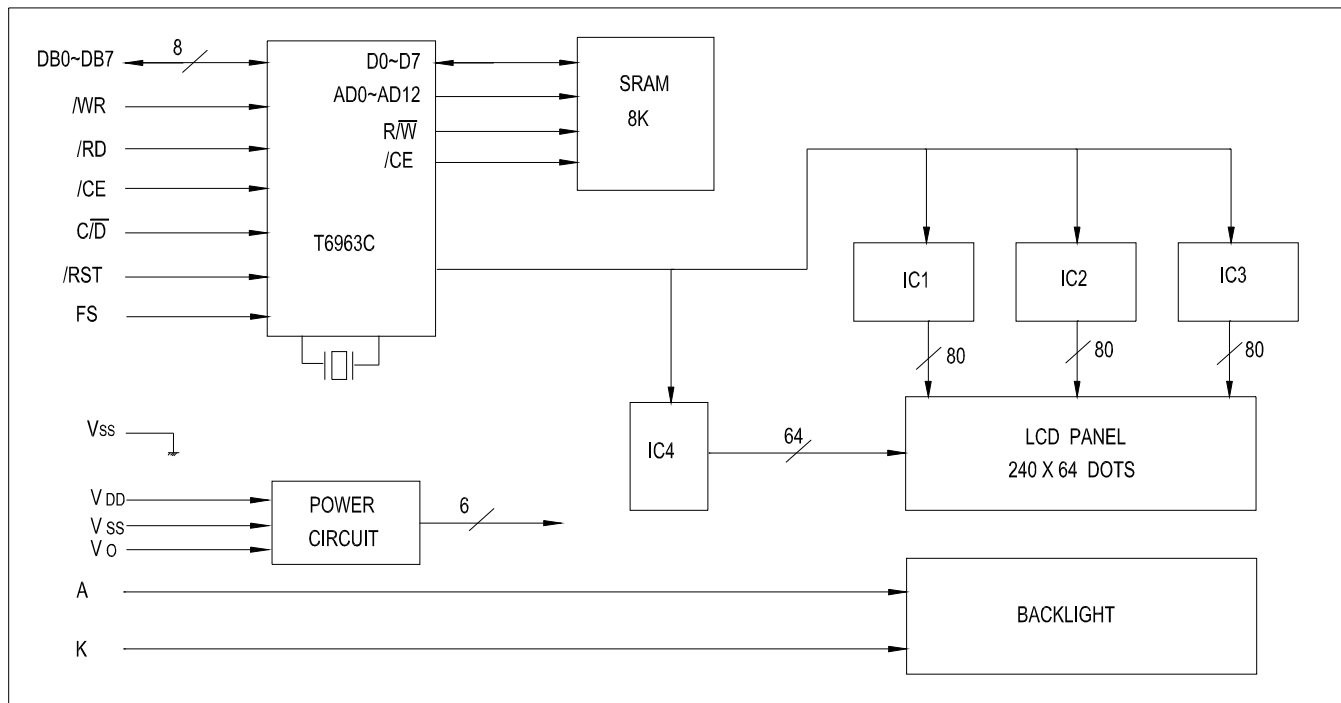


1.0 DIMENSIONAL DRAWING



2.0 BLOCK DIAGRAM



3.0 ELECTRICAL CHARACTERISTICS Ta=25 °C V_{DD}=5.0V±0.25V

Item	Symbol	Test Condition	Standard Value			
			Min.	Typ.	Max.	Unit
Power Supply Voltage	V _{DD} -V _{SS}	25°C	4.5	5.0	5.5	V
LCD Operation Voltage	V _{OP}		-	12.6	-	V
LCM Current Consumption	I _{DD}		-	-	20	mA
Backlight Forward Voltage	V _F		-	4.2	-	V

4.0 ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Test Condition	Standard Value		
			Min.	Max.	Unit
Supply Voltage (Logic)	$V_{DD}-V_{SS}$	25°C	-0.3	7.0	V
Supply Voltage (LCD)	$V_{DD}-V_O$		-	28	V
Input Voltage	V_{IN}		-0.3	$V_{DD}+0.3$	V
Operating Temp.	T_{OPR}	-	-20	70	°C
Storage Temp.	T_{STG}	-	-30	80	°C

5.0 PIN ASSIGNMENT

PIN No.	Symbol	Description
1	FG	Frame Ground
2	Vss	Ground
3	V_{DD}	Power supply for logic circuit
4	Vo	Power supply for LCD driving
5	$\overline{WR}$	Command and data write signal
6	$\overline{RD}$	Data and status read signal
7	$\overline{CE}$	Chip enable signal
8	C/D	Write: H-Command write, L-Data write Read: H-Status read, L-Data read
9	NC	No connection
10	$\overline{RESET}$	Reset signal
11~18	DB0~DB7	Data bus
19	FS	Font style
20	NC	No connection
21	LEDK	LED Back-light
22	LEDA	LED Back-light

Remark

1. LCD option: STN, FSTN .
2. Standard module.
3. Backlight option: LED EL backlight feature, other specs not available on catalog is under request.