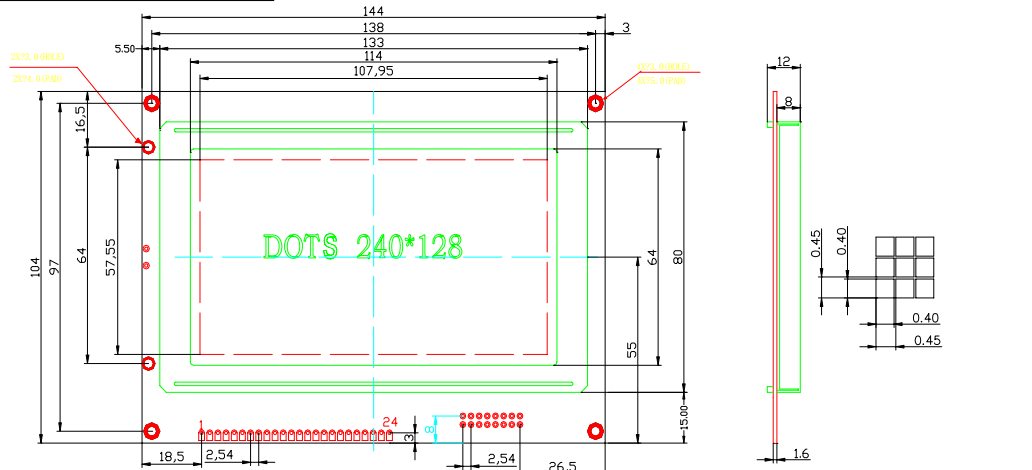
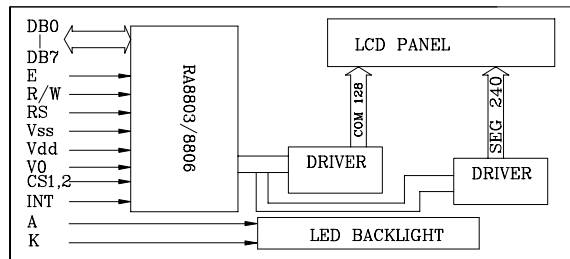




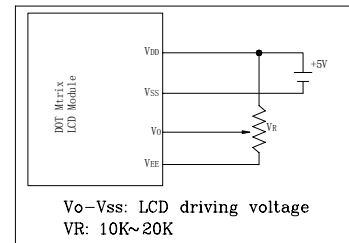
•EXTERNAL DIMENSIONS:



•BLOCK DIAGRAM:



•POWER SUPPLY:



MECHANICAL SPECIFICATIONS

ITEM	SPECIFICATION	UNIT
Module Size (WxHxT)	144.0x104.0x9.2[14.0]	mm
Viewing Area (WxH)	114.0x64.0	mm
Dot Number (WxH)	240x128	dots
Dot Size (WxH)	0.4x0.4	mm
Dot Pitch (WxH)	0.45x0.45	mm
LCD MODE	STN(Y/G,Gray,Blue),FSTN	

PIN ASSIGNMENT

Pin	Signal	Description
1	FG	Frame Ground
2	Vss	Power Supply (0V)
3	Vdd	Power Supply (+5V)
4	Vo	Contrast Adjust
5	Rs	Register/memory Select
6	WR	Write Signal
7	E	Enable / Read
8	CS1	Chip Select
9	CS2	Chip Select
10	Busy	Busy Signal
11	INT	Interrupt Signal
12	RST	Reset Signal
13~20	DB0~DB7	Data bus line
21	Vee	Negative Voltage Out
22~23	BL	LED Backlight

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MIN.	MAX.	UNIT
Power Supply (logic)	Vdd-Vss	-0.3	7.0	V
Power Supply (LCD)	Vdd-Vo	0.3	20.0	V
Input Voltage	Vi	-0.3	Vdd+0.3	V
Operating Temperature	Topr	0	50	°C
Storage Temperature	Tstg	-20	70	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Power Supply (logic)	Vdd	-	4.5	5.0	5.5	V
Supply Current (logic)	Idd	VDD=5.0V	0	9.5	-	mA
Driving Voltage (LCD)	Vdd-Vo		13.0	14.0	15.0	V
Driving Current (LCD)	Ilcd		0	5.0	-	mA
Input Voltage "H"	Vih		2.2	-	Vdd	V
Input Voltage "L"	Vil	-0.3	-	0.6	V	
Output Voltage "H"	Voh	Ioh=-0.205mA	2.4	-	-	V
Output Voltage "L"	Vol	Iol=1.2mA	-	-	0.4	V

LED BACKLIGHT SPECIFICATIONS

PARAMETER	TYP.	ITEM	TYP.
Forward Voltage	4.2V	Power Dissipation	3024W
Forward Current	720mA	Emission Wavelength	570nm