

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	Vdd - Vss	-0.3	7.0	V
Supply Voltage(LCD)	Vdd - V0	-0.3	25.0	V
Input Voltage	Vi	-0.3	Vdd + 0.3	V
Operating Temp.	Topr	-20	70	°C
Storage Temp.	Tstg	-30	80	°C

MECHANICAL DATA

Item	Max.	Unit
Module Size (W X H X T)	100.0 X 60.0 X 13.5	mm
Viewing Area(W X H)	84.0 X 31.0	mm
Dot Pitch(W X H)	0.41 X 0.41	mm
Dot Size(W X H)	0.36 X 0.36	mm
View Angle	6 or 12 O'Clock	

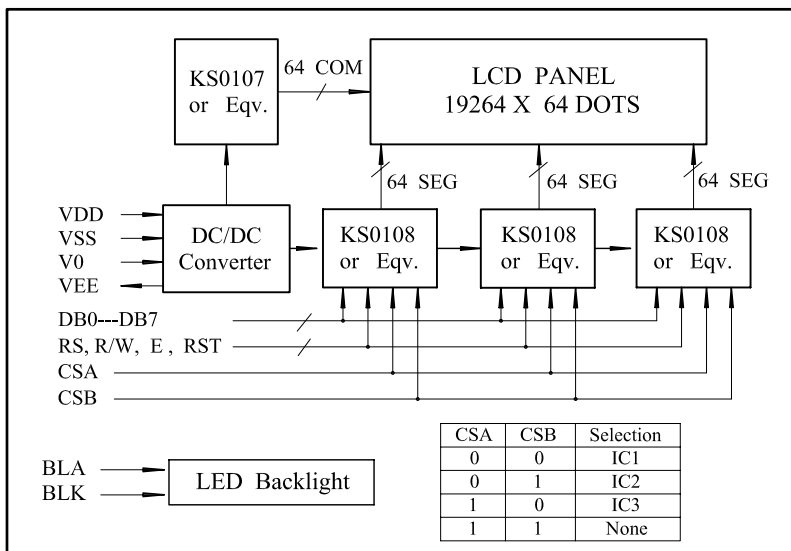
ELECTRICAL CHARACTERISTICS (Vdd=5V±0.25V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	Vih	--	2.0	--	Vdd	V
Input Low Voltage	Vil	--	-0.3	--	0.8	V
Output High Voltage	Voh	Ioh=-0.2mA	2.4	--	Vdd	V
Output Low Voltage	Vol	Iol=-1.6mA	0	--	0.4	V
Supply Current	Idd	Vdd=5.0V	--	6.0	8.0	mA
LCD Driving Voltage	Vdd - V0	Ta=25 °C	--	12.7	--	V

PIN CONNECTIONS

Pin	Symbol	Level	Function
1	DB7	H/L	Data bus line
2	DB6	H/L	
3	DB5	H/L	
4	DB4	H/L	
5	DB3	H/L	
6	DB2	H/L	
7	DB1	H/L	
8	DB0	H/L	
9	E	H/L	Enable signal
10	R/W	H/L	H:Read L:Write
11	RS	H/L	H:Data L:Instruction code
12	V0	--	Operation voltage for LCD
13	VDD	+5V	Power supply for logic
14	VSS	0V	Power GND
15	CSA	H/L	Chip selection signal A
16	CSB	H/L	Chip selection signal B
17	VEE	-10V	Output voltage for LCD driving
18	RST	L	Reset signal, active"L"
19	BLA	+5V	Power supply for LED backlight
20	BLK	0V	

BLOCK DIAGRAM



LCD Type

LCD Color	Blacklight
Yellow Green	LED/Yellow-green/4.1V
Blue	LED/ White /3.2V