

### ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	VDD-VSS	2.7	5.5	V
Supply Voltage(LCD)	Vo-VSS	3	7.0	V
Input Voltage	VI	-0.3	VDD +0.3	V
Operating Temp.	Topr	-20	70	°C
Storage Temp.	Tsta	-30	80	°C

## MECHANICAL DATA

Item	Nominal Dimensions	Unit
Module Size (W X H X T)	78.0 X 70.0 X 12.5	mm
Viewing Area (W X H)	62.0 X 44.0	mm
Dot Pitch (W X H)	0.44 X 0.60	mm
Dot Size (W X H)	0.39 X 0.55	mm

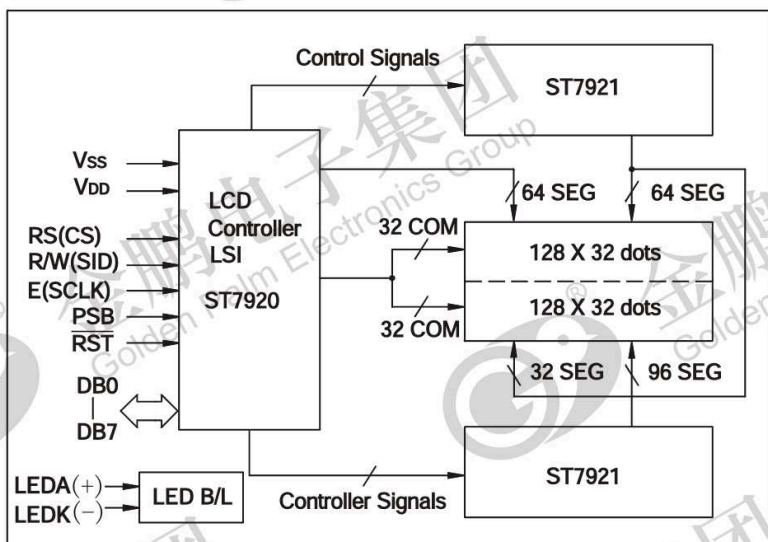
### ELECTRICAL CHARACTERISTICS (VDD=5V±0.25V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	$V_{IH}$	--	$0.7V_{DD}$	--	$V_{DD}$	V
Input Low Voltage	$V_{IL}$	--	0	--	$0.3V_{DD}$	V
Output High Voltage	$V_{OH}$	$I_{OH} = -0.4mA$	$V_{DD}-0.4$	--	--	V
Output Low Voltage	$V_{OL}$	$I_{OL} = +0.4mA$	--	--	0.4	V
Supply Current	$I_{DD}$	$V_{DD} = 5.0V$	--	3.0	5.0	mA

## PIN CONNECTIONS

Pin	Symbol	Level	Function
1	V <sub>SS</sub>	--	GND ( 0V )
2	V <sub>DD</sub>	--	Supply Voltage for Logic (+5V)
3	VO	--	Supply Voltage for LCD (NC)
4	RS(CS)	H/L	H : Data L : Instruction Code
5	RW(SID)	H/L	H : Read L : Write
6	E(SCLK)	H,H→L	Enable Signal
7	DB0	H/L	Data Bus Line
8	DB1	H/L	
9	DB2	H/L	
10	DB3	H/L	
11	DB4	H/L	
12	DB5	H/L	
13	DB6	H/L	
14	DB7	H/L	
15	PSB	H/L	H : Parallel Mode L : Serial Mode
16	NC	--	No Connection
17	RESET	L	Reset Signal,Active LOW
18	NC	--	No Connection
19	LED+	--	LED Backlight Power Supply
20	LED-	--	

### BLOCK DIAGRAM



### LED BACKLIGHT SPECIFICATIONS ( Ta=25 °C )

Item	Symbol	Typ.	Max.	Unit
Forward Voltage	$V_f$	4.3	5.0	V
Forward Current	$I_f$	40	70	mA
Emission Wave Length	$\lambda_p$	568	--	nm