

<b>G12232-5</b>	<b>122 DOTS×32 DOTS</b>	<b>1/32 DUTY</b>	<b>1/6 BIAS</b>
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**FEATURE:**

LCD TYPE	STN/FSTN
LCM BACKLIGHT TYPE	----
LCM CONTROLLER IC	BUILT IN SED1520 OR EQUIVALENT
POWER SUPPLY FOR LCM	DC +5.0V
LED BACKLIGHT INPUT	DC +5.0V
EL BACKLIGHT INPUT	----
EL INVERTER	----
FL BACKLIGHT INPUT	-
FL INVERTER	-
LCM DIMENSION	84.0×36.0×9.5 mm
LCM VIEWING AREA	74.0×22.0 mm
LCD DOT SIZE	0.50×0.50 mm
LCD DOT PITCH	0.55×0.55 mm

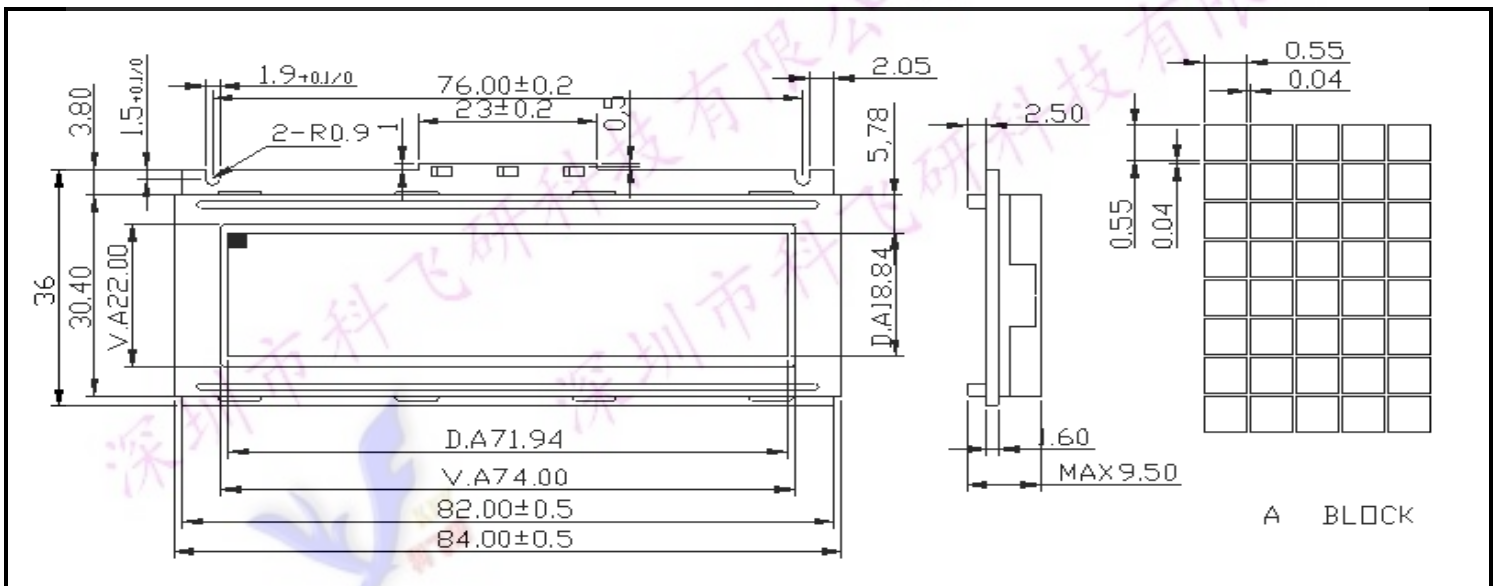
**3.ABSOLUTE MAXIMUM RATINGS:**

ITEM	SYM	MIN	TYP	MAX	UNIT
OPERATING TEMP.	Top	-20	-	+70	
STORAGE TEMP.	Tst	-30	-	+80	
INPUT VOLTAGE	Vi	Vss	-	VDD	V
SUPPLY VOL. FOR LOGIC	VDD-VSS	-	5.0	6.5	V
SUPPLY VOL. FOR LCD	VDD-Vo	-	-	6.5	V

**5.INTERFACE PIN CONNECTIONS:**

NO	SYM	LEVEL	FUNCTION
1	Vss	-	0V
2	VDD	-	+5V
3	Vo	-	CONTRAST ADJ.
4	Ao	H/L	H:DATA, L:INSTRUCTION CODE
5	NC	---	----
6	NC	---	----
7	E1	H,H→L	Chip select for IC1
8	E2	H,H→L	Chip select for IC2
9	R/W	H/L	H:READ(LCM →MPU) L:WRITE(MPU→LCM)
10	DB0	H/L	DATA BIT0
11	DB1	H/L	DATA BIT1
12	DB2	H/L	DATA BIT2
13	DB3	H/L	DATA BIT3
14	DB4	H/L	DATA BIT4
15	DB5	H/L	DATA BIT5
16	DB6	H/L	DATA BIT6
17	DB7	H/L	DATA BIT7
18	RES	H/L	RESET SIGNAL
19	A(+)	+5.0V	BACKLIGHT(+)
20	K(-)	0V	BACKLIGHT(-)

**6.DIMENSIONAL DRAWING :**



**2.ELECTRICAL CHARACTERISTICS:**

ITEM	SYM	CONDITION	MIN	TYP	MAX	UNIT
SUPPLY VOLTAGE FOR LOGIC	VDD-VSS	Ta = 2 5	-	5.0	5.5	V
SUPPLY VOLTAGE FOR LCD DRIVER	VDD-VSS	Ta = 2 5	-	-	-	V
OPERATING VOL. FOR LCD MODULE	VDD-Vo	Ta = 2 5	-	5.8	-	V
INPUT HIGH VOL.	VIH	-	2.2	-	VDD	V
INPUT LOW VOL.	VIL	-	0	-	0.6	V
SUPPLY CURRENT FOR LOGIC	IDD	VDD=5.0V	-	3.0	4.5	mA
SUPPLY CURRENT FOR LCD	ILCD	-	-	-	6.0	mA
LED CURRENT	IF	Ta = 2 5	-	20	-	mA
LED DISSIPATION	Pd	Ta = 2 5	-	100	-	mW

**4. BLOCK DIAGRAM:**

