

液晶之友 电话: 020-33819057  
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# PRODUCT SPECIFICATION

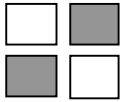
MONOCHROME LCD MODULE

PART NUMBER : FDG122032C

DESCRIPTION : 32 x122 Graphic

REVISION : Rev A

	Approval for Specification only		Approval for Sample Only
	Approval for Pre-production	<b>x</b>	Approval for Mass Production



# FDG122032C ( 122 DOTS X 32 DOTS )

## FEATURES

- ◆ BUILT-IN CONTROLLER (SED1520 OR EQUIVALENT)
- ◆ +5 V POWER SUPPLY
- ◆ 1/32 DUTY CYCLE
- ◆ 8-BIT PARALLEL INTERFACE
- ◆ 4.2 V LED FORWARD VOLTAGE

## MECHANICAL DATA

ITEM	DIMENSIONS	UNIT
Module Size ( W x H x T )	85.0 x 40.0 x 8.8 ( 12.7 LED )	mm
Viewing Area ( W x H )	60.5 x 18.5	mm
Active Area ( W x H )	53.64 x 15.64	mm
Dot Size ( W x H )	0.40 x 0.45	mm
Dot Pitch ( W x H )	0.44 x 0.49	mm

## INTERFACE PIN CONNECTIONS

NO.	SYMBOL	LEVEL	FUNCTION
1	VSS	0V	Power Supply Ground
2	VDD	5V	Power Supply Voltage
3	Vo	-	Contrast Adjustment Voltage
4	Ao	H/L	Data Type Select Signal
5	CS1	H	Chip Select Signal For IC1
6	CS2	H	Chip Select Signal For IC2
7	CL	H/L	Clock Input (2 KHz)
8	E	H→L	Enable Signal
9	R/W	H/L	H : Read / L : Write
10~17	DB0~DB7	H/L	Data Bus Line
18	/RES	L	Reset Signal
19	A	4.2V	LED Power (+)
20	K	0V	LED Power (-)

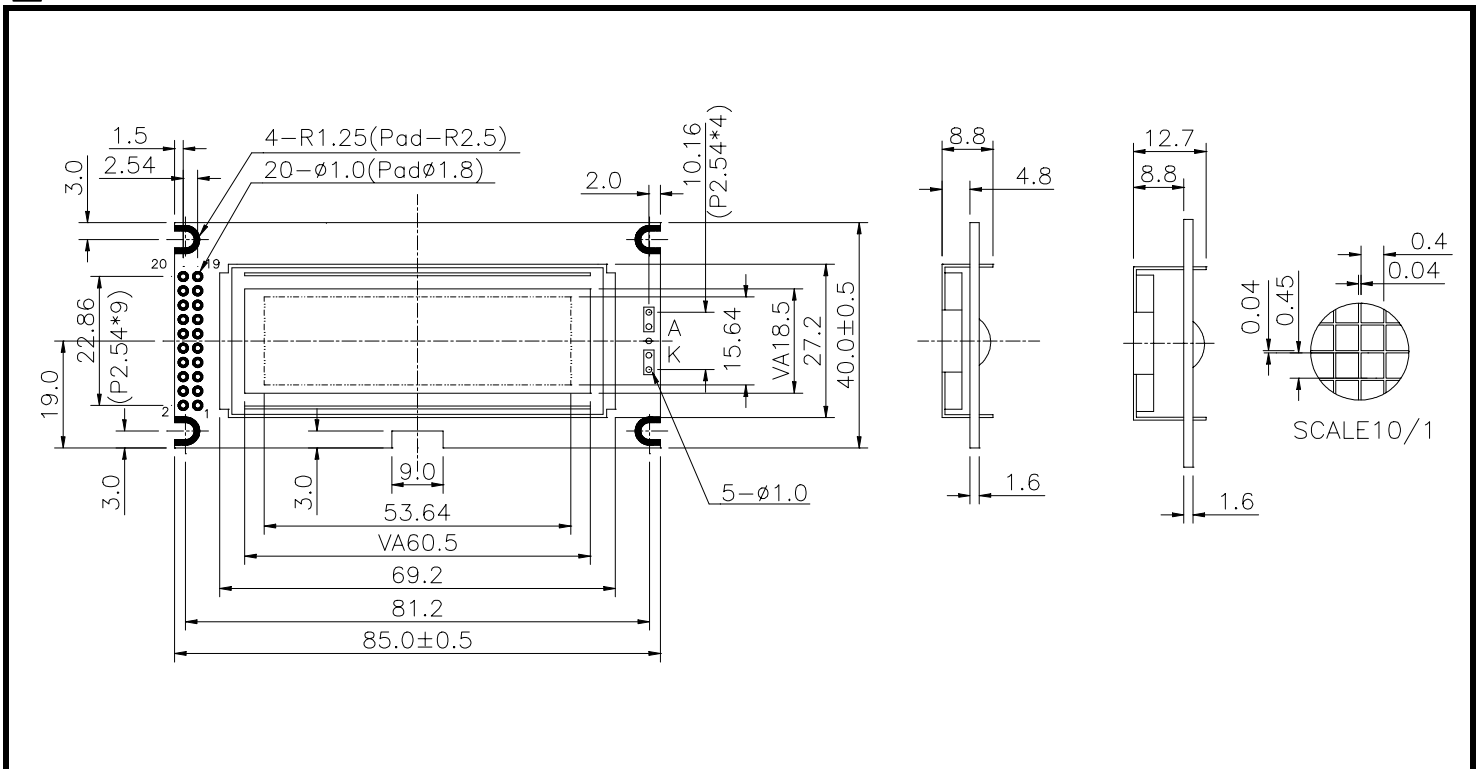
## ABSOLUTE MAXIMUM RATINGS

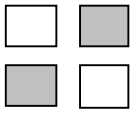
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	VDD-VSS	0	-	7	V
Supply Voltage For LCD Drive	VDD-Vo	0	-	12	V
Input Voltage	Vi	VSS	-	VDD	V

## ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Voltage For Logic	VDD-VSS	-	4.5	5	5.5	V	
Supply Voltage For LCD	VDD-Vo	VDD=5V Ta=25°C	4.4	4.8	5.2	V	
Supply Current	IDD	VDD=5V	-	2.5	4.5	mA	
Input Voltage	"HIGH" Level	V <sub>IH</sub>	-	2.2	-	VDD	V
	"LOW" Level	V <sub>IL</sub>	-	-	-	0.6	V
Output Voltage	"HIGH" Level	V <sub>OH</sub>	-	2.4	-	-	V
	"LOW" Level	V <sub>OL</sub>	-	-	-	0.4	V

## EXTERNAL DIMENSIONS

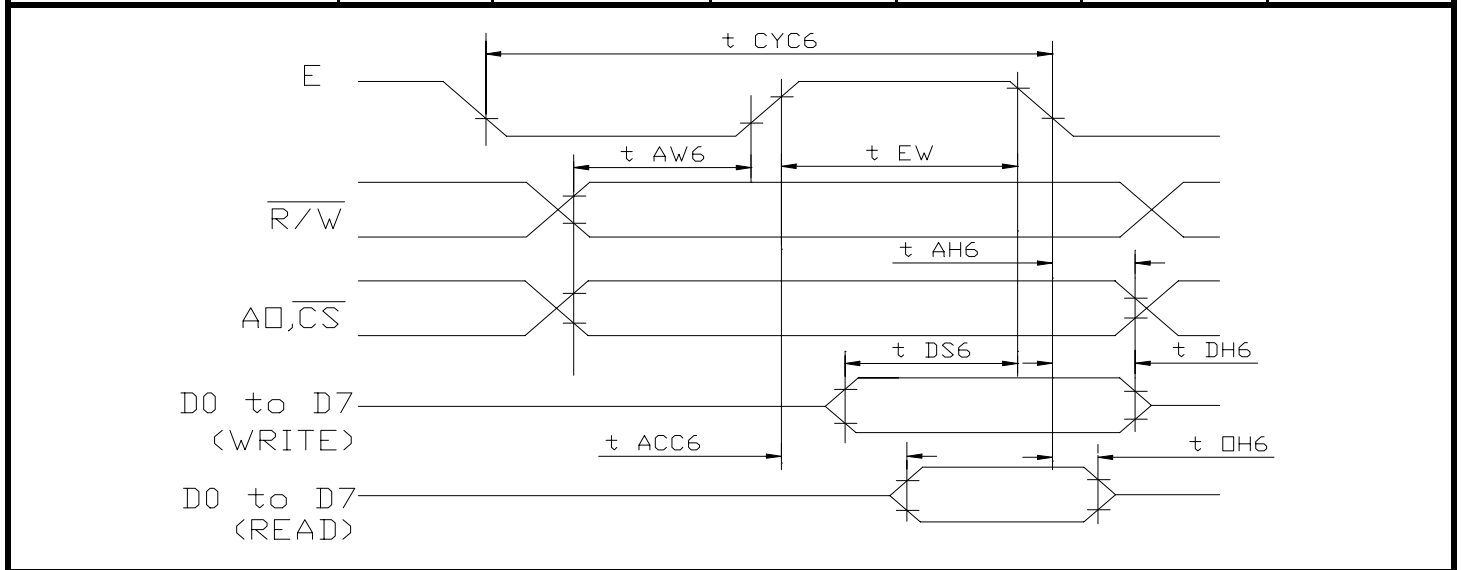




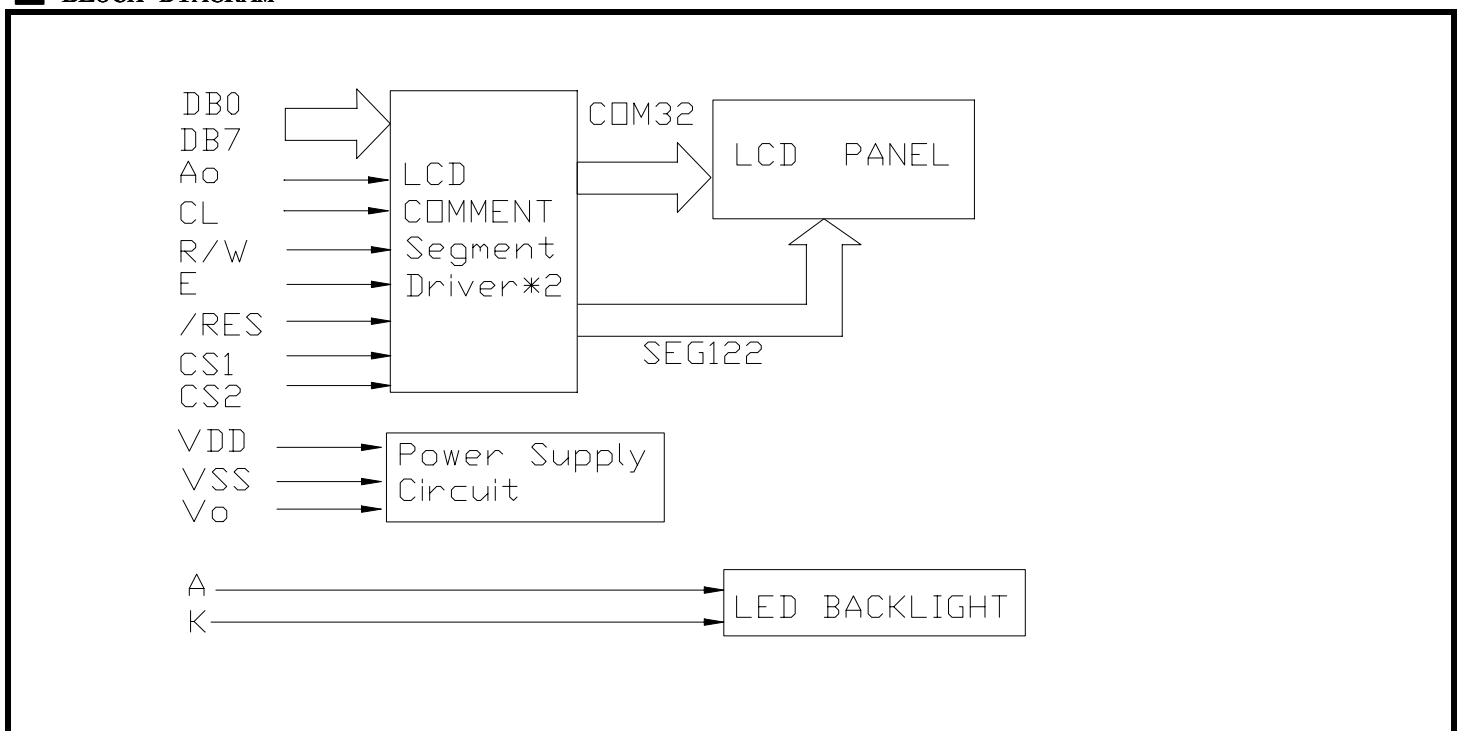
# FDG122032C ( 122 DOTS X 32 DOTS )

## ■ TIMING CHARACTERISTICS

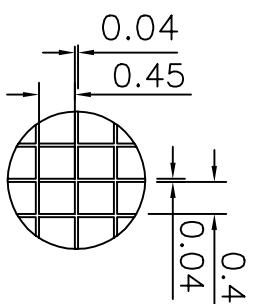
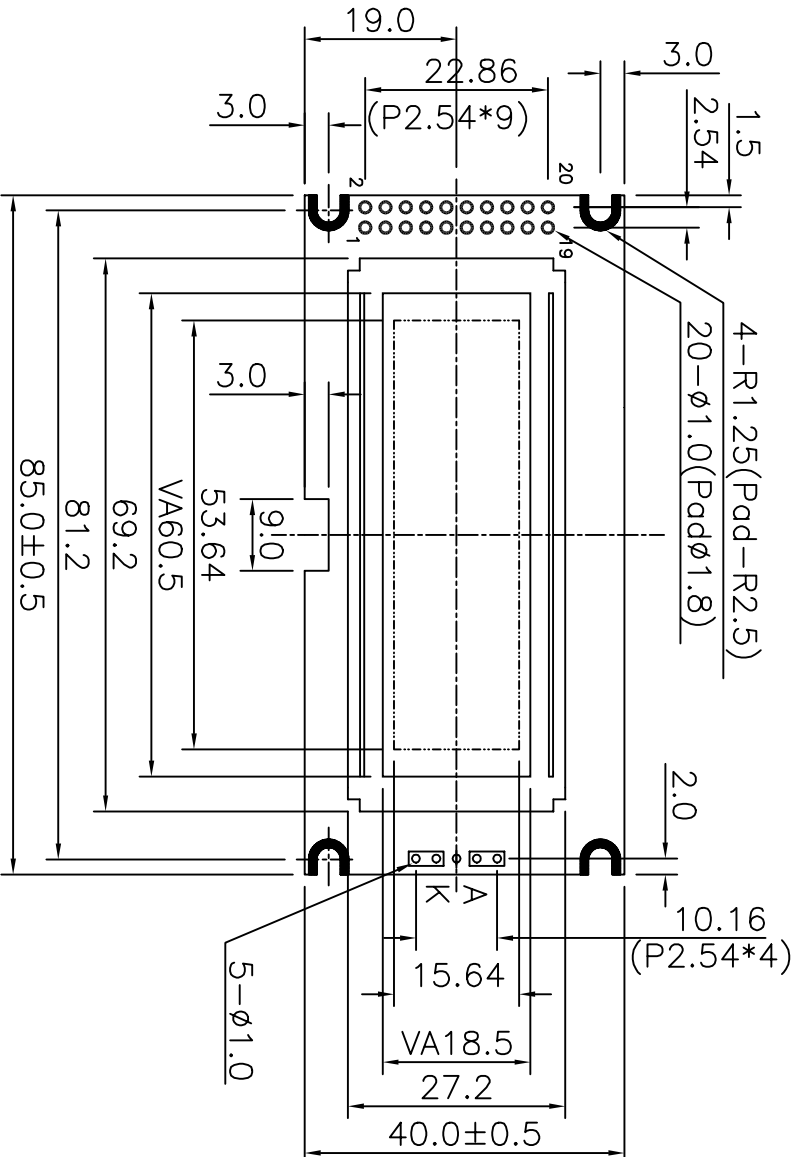
ITEM	SYMBOL	MIN.	TYP.	MAX.	UNIT.
System Cycle Time	$t_{CYC6}$	1000	-	-	ns
Address Set-up Time	$t_{AW6}$	20	-	-	ns
Address Hold Time	$t_{AH6}$	10	-	-	ns
Data Set-up Time	$t_{DS6}$	80	-	-	ns
Data Hold Time	$t_{DH6}$	10	-	-	ns
Output Disable Time	$t_{OH6}$	10	-	60	ns
Access Time	$t_{ACC6}$	-	-	90	ns
Enable Pulse Width	Read	$t_{EW}$	-	-	ns
	Write				



## ■ BLOCK DIAGRAM



PIN NO	SIGNAL
1	VSS
2	VDD
3	VO
4	AO
5	CS1
6	CS2
7	CL
8	E
9	R/W
10	DB0
11	DB1
12	DB2
13	DB3
14	DB4
15	DB5
16	DB6
17	DB7
18	RES
19	A
20	K



SCALE 10/1

NOTE	ITEM	CONTENT	DATA	REV	TOLERANCE	SCALE	UNIT	DWYN	CUSTOMER	APVL	TITLE	MODEL	DWG NO	PAGE
		CHANGE NUMBER	2004.03.01	0	X. ±0.30 X ±0.20 .XX±0.05	1/1	mm	Gili	2004.03.01		MODULE	SG12232C	A-A2-0004	1/1
<b>SUNLIKE DISPLAY</b>														